

# Untitled

## SEQUENCE LISTING

<110> Pauli, Benedicht U.

<120> Calcium-activated chloride channel proteins and their use in anti-metastatic therapy

<130> 18617.new

<140>

<141> 2004-02-17

<150> US/60/065,922

<151> 1997-11-17

<160> 63

<210> 1

<211> 3317

<212> DNA

<213> Unknown

<220>

<223> sequence encoding Lu-ECAM-1 and Lu-ECAM-1 associated protein from bovine endothelial cells

<400> 1

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acatgtgcaa aa atg gtg ctc tgt ctg aat gtt att ctg ttc cta act  98
ttg cat ctc ttg cct gga atg aaa agt tca atg gta aat ttg att  143
aac aat ggg tat gat ggc att gtc att gca att aac ccc agt gtg  188
cca gaa gat gaa aaa ctc att gaa aac ata aag gaa atg gta act  233
gaa gct tct act tac ctg ttt cat gcc acc aaa cga aga gtt tat  278
ttc agg aat gtg agc att tta att cca atg acc tgg aaa tca aaa  323
tct gag tac ttc ata cca aaa caa gaa tca tat gac cag gca gat  368
gtc ata gtt gct aat ccc tat cta aaa tat gga gat gat ccc tat  413
aca ctt caa tat gga agg tgt gga gaa aaa gga aaa tat ata cat  458
ttt act cca aac ttc ttg ttg act aat aat ttc cac atc tat ggg  503

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Pauli sequence.txt

tcc cga ggc aga gta ttt gtc cat gag tgg gcc cat ctc cgc tgg	548
gga ata ttt gat gag tat aat gtg gac cag cca ttc tat att tcc	593
aga aag aac act att gaa gca aca aga tgt tca act cat att act	638
ggt att aat gtg gtt ttc aag aaa tgc cct gga ggc agc tgt ata	683
aca agt cta tgc aga cgt gac tca cag aca ggg ctg tat gaa gca	728
aaa tgt aca ttc ctt cca aaa aaa tcc cag act gca aag gaa tcc	773
att atg ttt atg cca agt ctc cat tct gtg act gaa ttt tgt aca	818
gaa aaa aca cac aat aca gaa gct cca aac cta caa aac aaa atg	863
tgc aat ggc aaa agc aca tgg gat gta atc atg aac tct gtt gac	908
ttt cag aat aca tct ccc atg aca gaa atg aat cca ccg act cat	953
cct aca ttt tca ttg ctc aag tcc aaa cag cgg gta gtc tgt ttg	998
gta ctt gat aaa tct gga agc atg tct gca gaa gac cgt ctc ttt	1043
caa atg aat caa gca gca gaa cta tac ttg att caa gtt att gaa	1088
aag gga tct tta gtt ggg atg gtt aca ttt gac agt gtt gct gaa	1133
atc caa aat cat cta aca aga ata act gat gat aat gtt tac caa	1178
aag atc acc gca aaa ctg cct caa gta gct aat ggt gga act tca	1223
att tgt aga ggg ctc aaa gca gga ttc cag gca att atc cac agt	1268
gac cag agt act tct ggt tct gaa atc ata cta tta act gat ggg	1313
gaa gat aat gaa ata aat tca tgc ttt gag gat gta aaa cga agt	1358
ggt gca atc atc cac acc att gct ctg gga ccc tct gct gcc aaa	1403
gaa ctg gag aca ttg tca aat atg aca gga gga tat cgt ttt ttt	1448
gcc aat aaa gac ata act ggc ctt act aat gct ttc agt aga att	1493
tca tct aga agt gga agc atc act cag cag gct att cag ttg gaa	1538
agc aaa gcc ttg aaa att aca gga agg aaa aga gta aac ggc aca	1583

# Pauli sequence.txt

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gtg cct gta gac agt aca gtt gga aat gac act ttc ttt gtt gtc 1628
aca tgg aca ata caa aaa cca gaa att gtt ctc caa gat cca aaa 1673
gga aag aaa tat aaa acc tcg gat ttc aaa gaa gat aag tta aat 1718
att cga tct gct cgt ctg caa ata cct ggt att gca gag aca ggt 1763
act tgg act tac agc ctt cta aat aat cat gcc agc tct caa atg 1808
cta aca gtg aca gtg acc act cga gca aga agt cct act ata ccc 1853
cca gta att gca aca gct cac atg agt caa cat aca gca cat tat 1898
cct agc cca atg att gtt tat gca caa gtc agt caa ggg ttt ttg 1943
cct gta ctg gga atc agt gta ata gcc att ata gaa acc gaa gat 1988
gga cat caa gta aca ttg gag ctc tgg gac aat ggt gca ggt cgt 2033
gat act gtc aag aat gat ggc atc tac tca aga tac ttt aca gat 2078
tac tat gga aat ggt aga tac agt tta aaa gta cat gca cag gca 2123
aga aac aac acg gct agg cta aat tta aga caa cca cag aac aaa 2168
gtt cta tat gtt cca ggc tac gtt gaa aac ggt aaa att ata ctg 2213
aac cca ccc aga cct gaa gtc aaa gat gac ctg gca aaa gct aaa 2258
ata gaa gac ttt agc aga cta acc tct gga ggg tca ttt act gta 2303
tca gga gct cct cct cct ggt aat cac cct tct gtg ttc cca ccc 2348
agt aaa att aca gat ctt gag gct aag ttc aaa gaa gat tat att 2393
caa ctt tca tgg aca gcc cct ggc aat gtc cta gat aaa gga aaa 2438
gcc aac agc tac att ata aga ata agt aag agt ttc atg gat cgt 2483
caa gaa gat ttt gac aat gcg act tta gtg aat act tct aat cta 2528
ata cct aag gag gcc gga tca aaa gaa aat ttt gaa ttt aag cca 2573
gaa cat ttt aga gta gaa aat ggc acc aaa ttc tat att tca gtc 2618
caa gcc atc aac gaa gcc aat ctc atc tca gag gtt tct cac att 2663

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Pauli sequence.txt

gta caa gca atc aaa ttt att cct cta cca gaa gac agt gtc cat 2708  
gat ctg ggt acc aag att tct gaa atc act ctg gca att tta gga 2753  
tta cca atg att ttc tct gta ttt taaactagga attgtgtcag 2797  
cactgataac caatgttata catagttggt acacatttat ttaggattta 2847  
attcgctatt ttcttggttct tcagtagcta aattgtgtcc aaccttgcca 2897  
ctgcaggact gcagcatgcc aggtttccct gtccatcacc aactcccaga 2947  
gcttgctcaa atccatgttc atttgagtca gtaatgctaa ctatctcatc 2997  
ctctactgcc ctcttctctg tttaccttca atctttcccc agcattagga 3047  
tcttttccaa tgagtcagct cttagcatcg ggtggccaaa atattggcat 3097  
tttcagcaac agttcttcaa atgaaatatc cagggtgatt ttcttttagga 3147  
tagactgggtg actgacagtt caagggacac tctggagtct tctccagcac 3197  
cgcaccgcag tttgaaagaa ccagttcttt ggtactcagc cttctttata 3247  
gtccaatgct cacatctatc atgactcctg gaaaaaccat agctttgaga 3297  
aatggatctt tgttgggaaa 3317

<210> 2  
<211> 905  
<212> PRT  
<213> Unknown

<220>  
<223> Lu-ECAM-1 precursor from bovine endothelial cells

<400> 2  
Met Val Leu Cys Leu Asn Val Ile Leu Phe Leu Thr Leu His Leu  
-20 -15 -10  
Leu Pro Gly Met Lys Ser Ser Met Val Asn Leu Ile Asn Asn Gly  
-5 1 5  
Tyr Asp Gly Ile Val Ile Ala Ile Asn Pro Ser Val Pro Glu Asp  
10 15 20

Pauli sequence.txt

Glu	Lys	Leu	Ile	Glu	Asn	Ile	Lys	Glu	Met	Val	Thr	Glu	Ala	Ser	25	30	35
Thr	Tyr	Leu	Phe	His	Ala	Thr	Lys	Arg	Arg	Val	Tyr	Phe	Arg	Asn	40	45	50
Val	Ser	Ile	Leu	Ile	Pro	Met	Thr	Trp	Lys	Ser	Lys	Ser	Glu	Tyr	55	60	65
Phe	Ile	Pro	Lys	Gln	Glu	Ser	Tyr	Asp	Gln	Ala	Asp	Val	Ile	Val	70	75	80
Ala	Asn	Pro	Tyr	Leu	Lys	Tyr	Gly	Asp	Asp	Pro	Tyr	Thr	Leu	Gln	85	90	95
Tyr	Gly	Arg	Cys	Gly	Glu	Lys	Gly	Lys	Tyr	Ile	His	Phe	Thr	Pro	100	105	110
Asn	Phe	Leu	Leu	Thr	Asn	Asn	Phe	His	Ile	Tyr	Gly	Ser	Arg	Gly	115	120	125
Arg	Val	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Ile	Phe	130	135	140
Asp	Glu	Tyr	Asn	Val	Asp	Gln	Pro	Phe	Tyr	Ile	Ser	Arg	Lys	Asn	145	150	155
Thr	Ile	Glu	Ala	Thr	Arg	Cys	Ser	Thr	His	Ile	Thr	Gly	Ile	Asn	160	165	170
Val	Val	Phe	Lys	Lys	Cys	Pro	Gly	Gly	Ser	Cys	Ile	Thr	Ser	Leu	175	180	185
Cys	Arg	Arg	Asp	Ser	Gln	Thr	Gly	Leu	Tyr	Glu	Ala	Lys	Cys	Thr	190	195	200
Phe	Leu	Pro	Lys	Lys	Ser	Gln	Thr	Ala	Lys	Glu	Ser	Ile	Met	Phe	205	210	215
Met	Pro	Ser	Leu	His	Ser	Val	Thr	Glu	Phe	Cys	Thr	Glu	Lys	Thr	220	225	230
His	Asn	Thr	Glu	Ala	Pro	Asn	Leu	Gln	Asn	Lys	Met	Cys	Asn	Gly	235	240	245
Lys	Ser	Thr	Trp	Asp	Val	Ile	Met	Asn	Ser	Val	Asp	Phe	Gln	Asn	250	255	260

Pauli sequence.txt

Thr	Ser	Pro	Met	Thr	Glu	Met	Asn	Pro	Pro	Thr	His	Pro	Thr	Phe
265					270					275				
Ser	Leu	Leu	Lys	Ser	Lys	Gln	Arg	Val	Val	Cys	Leu	Val	Leu	Asp
280					285					290				
Lys	Ser	Gly	Ser	Met	Ser	Ala	Glu	Asp	Arg	Leu	Phe	Gln	Met	Asn
295					300					305				
Gln	Ala	Ala	Glu	Leu	Tyr	Leu	Ile	Gln	Val	Ile	Glu	Lys	Gly	Ser
310					315					320				
Leu	Val	Gly	Met	Val	Thr	Phe	Asp	Ser	Val	Ala	Glu	Ile	Gln	Asn
325					330					335				
His	Leu	Thr	Arg	Ile	Thr	Asp	Asp	Asn	Val	Tyr	Gln	Lys	Ile	Thr
340					345					350				
Ala	Lys	Leu	Pro	Gln	Val	Ala	Asn	Gly	Gly	Thr	Ser	Ile	Cys	Arg
355					360					365				
Gly	Leu	Lys	Ala	Gly	Phe	Gln	Ala	Ile	Ile	His	Ser	Asp	Gln	Ser
370					375					380				
Thr	Ser	Gly	Ser	Glu	Ile	Ile	Leu	Leu	Thr	Asp	Gly	Glu	Asp	Asn
385					390					395				
Glu	Ile	Asn	Ser	Cys	Phe	Glu	Asp	Val	Lys	Arg	Ser	Gly	Ala	Ile
400					405					410				
Ile	His	Thr	Ile	Ala	Leu	Gly	Pro	Ser	Ala	Ala	Lys	Glu	Leu	Glu
415					420					425				
Thr	Lys	Ser	Asn	Met	Thr	Gly	Gly	Tyr	Arg	Phe	Phe	Ala	Asn	Lys
430					435					440				
Asp	Ile	Thr	Gly	Leu	Thr	Asn	Ala	Phe	Ser	Arg	Ile	Ser	Ser	Arg
445					450					455				
Ser	Gly	Ser	Ile	Thr	Gln	Gln	Ala	Ile	Gln	Leu	Glu	Ser	Lys	Ala
460					465					470				
Leu	Lys	Ile	Thr	Gly	Arg	Lys	Arg	Val	Asn	Gly	Thr	Val	Pro	Val
475					480					485				
Asp	Ser	Thr	Val	Gly	Asn	Asp	Thr	Phe	Phe	Val	Val	Thr	Trp	Thr
490					495					500				

Pauli sequence.txt

Ile	Gln	Lys	Pro	Glu	Ile	Val	Leu	Gln	Asp	Pro	Lys	Gly	Lys	Lys	505	510	515
Tyr	Lys	Thr	Ser	Asp	Phe	Lys	Glu	Asp	Lys	Leu	Asn	Ile	Arg	Ser	520	525	530
Ala	Arg	Leu	Gln	Ile	Pro	Gly	Ile	Ala	Glu	Thr	Gly	Thr	Trp	Thr	535	540	545
Tyr	Ser	Leu	Leu	Asn	Asn	His	Ala	Ser	Ser	Gln	Met	Leu	Thr	Val	550	555	560
Thr	Val	Thr	Thr	Arg	Ala	Arg	Ser	Pro	Thr	Ile	Pro	Pro	Val	Ile	565	570	575
Ala	Thr	Ala	His	Met	Ser	Gln	His	Thr	Ala	His	Tyr	Pro	Ser	Pro	580	585	590
Met	Ile	Val	Tyr	Ala	Gln	Val	Ser	Gln	Gly	Phe	Leu	Pro	Val	Leu	595	600	605
Gly	Ile	Ser	Val	Ile	Ala	Ile	Ile	Glu	Thr	Glu	Asp	Gly	His	Gln	610	615	620
Val	Thr	Leu	Glu	Leu	Trp	Asp	Asn	Gly	Ala	Gly	Arg	Asp	Thr	Val	625	630	635
Lys	Asn	Asp	Gly	Ile	Tyr	Ser	Arg	Tyr	Phe	Thr	Asp	Tyr	Tyr	Gly	640	645	650
Asn	Gly	Arg	Tyr	Ser	Leu	Lys	Val	His	Ala	Gln	Ala	Arg	Asn	Asn	655	660	665
Thr	Ala	Arg	Leu	Asn	Leu	Arg	Gln	Pro	Gln	Asn	Lys	Val	Leu	Tyr	670	675	680
Val	Pro	Gly	Tyr	Val	Glu	Asn	Gly	Lys	Ile	Ile	Leu	Asn	Pro	Pro	685	690	695
Arg	Pro	Glu	Val	Lys	Asp	Asp	Leu	Ala	Lys	Ala	Lys	Ile	Glu	Asp	700	705	710
Phe	Ser	Arg	Leu	Thr	Ser	Gly	Gly	Ser	Phe	Thr	Val	Ser	Gly	Ala	715	720	725
Pro	Pro	Pro	Gly	Asn	His	Pro	Ser	Val	Phe	Pro	Pro	Ser	Lys	Ile	730	735	740

Pauli sequence.txt

Thr Asp Leu Glu Ala Lys Phe Lys Glu Asp Tyr Ile Gln Leu Ser  
745 750 755

Trp Thr Ala Pro Gly Asn Val Leu Asp Lys Gly Lys Ala Asn Ser  
760 765 770

Tyr Ile Ile Arg Ile Ser Lys Ser Phe Met Asp Arg Gln Glu Asp  
775 780 785

Phe Asp Asn Ala Thr Leu Val Asn Thr Ser Asn Leu Ile Pro Lys  
790 795 800

Glu Ala Gly Ser Lys Glu Asn Phe Glu Phe Lys Pro Glu His Phe  
805 810 815

Arg Val Glu Asn Gly Thr Lys Phe Tyr Ile Ser Val Gln Ala Ile  
820 825 830

Asn Glu Ala Asn Leu Ile Ser Glu Val Ser His Ile Val Gln Ala  
835 840 845

Ile Lys Phe Ile Pro Leu Pro Glu Asp Ser Val His Asp Leu Gly  
850 855 860

Thr Lys Ile Ser Glu Ile Thr Leu Ala Ile Leu Gly Leu Pro Met  
865 870 875

Ile Phe Ser Val Phe  
880 884

<210> 3

<211> 203

<212> PRT

<213> Unknown

<220>

<223> Lu-ECAM-1 associated protein from bovine endothelial cells

<400> 3

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1 5 10 15

Asn Pro Pro Arg Pro Glu Val Lys Asp Asp Leu Ala Lys Ala Lys  
20 25 30

Ile Glu Asp Phe Ser Arg Leu Thr Ser Gly Gly Ser Phe Thr Val  
35 40 45



Pauli sequence.txt

Ser	Gly	Ala	Pro	Pro	Pro	Gly	Asn	His	Pro	Ser	Val	Phe	Pro	Pro	50	55	60
Ser	Lys	Ile	Thr	Asp	Leu	Glu	Ala	Lys	Phe	Lys	Glu	Asp	Tyr	Ile	65	70	75
Gln	Leu	Ser	Trp	Thr	Ala	Pro	Gly	Asn	Val	Leu	Asp	Lys	Gly	Lys	80	85	90
Ala	Asn	Ser	Tyr	Ile	Ile	Arg	Ile	Ser	Lys	Ser	Phe	Met	Asp	Arg	95	100	105
Gln	Glu	Asp	Phe	Asp	Asn	Ala	Thr	Leu	Val	Asn	Thr	Ser	Asn	Leu	110	115	120
Ile	Pro	Lys	Glu	Ala	Gly	Ser	Lys	Glu	Asn	Phe	Glu	Phe	Lys	Pro	125	130	135
Glu	His	Phe	Arg	Val	Glu	Asn	Gly	Thr	Lys	Phe	Tyr	Ile	Ser	Val	140	145	150
Gln	Ala	Ile	Asn	Glu	Ala	Asn	Leu	Ile	Ser	Glu	Val	Ser	His	Ile	155	160	165
Val	Gln	Ala	Ile	Lys	Phe	Ile	Pro	Leu	Pro	Glu	Asp	Ser	Val	His	170	175	180
Asp	Leu	Gly	Thr	Lys	Ile	Ser	Glu	Ile	Thr	Leu	Ala	Ile	Leu	Gly	185	190	195
Leu	Pro	Met	Ile	Phe	Ser	Val	Phe								200	203	

<210> 4

<211> 26

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

<400> 4

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<210> 5

<211> 23

Pauli sequence.txt

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

<400> 5

gaaaatggca ccaaattcta tat 23

<210> 6

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

<400> 6

atatagaatt tgggtgccatt ttc 23

<210> 7

<211> 19

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

<400> 7

tagaagtatt cactaaagt 19

<210> 8

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Amplification primer

<400> 8

tactgtctac aggcaactgtg ccgtttac 28

<210> 9

<211> 18

<212> DNA

<213> Artificial sequence

<220>

Pauli sequence.txt

<223> Amplification primer

<400> 9

ggaatatttg atgagtat 18

<210> 10

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

<400> 10

attcatttga aagagacg 18

<210> 11

<211> 795

<212> PRT

<213> Unknown

<220>

<223> Variant of Lu-ECAM-1 from bovine endothelial cells

<400> 11

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	-20					-15						-10		

Leu	Pro	Gly	Met	Lys	Ser	Ser	Met	Val	Asn	Leu	Ile	Asn	Asn	Gly
	-5					1				5				

Tyr	Asp	Gly	Ile	Val	Ile	Ala	Ile	Asn	Pro	Ser	Val	Pro	Glu	Asp
10					15					20				

Glu	Lys	Leu	Ile	Glu	Asn	Ile	Lys	Glu	Met	Val	Thr	Glu	Ala	Ser
25					30					35				

Thr	Tyr	Leu	Phe	His	Ala	Thr	Lys	Arg	Arg	Val	Tyr	Phe	Arg	Asn
40					45					50				

Val	Ser	Ile	Leu	Ile	Pro	Met	Thr	Trp	Lys	Ser	Lys	Ser	Glu	Tyr
55					60					65				

Phe	Ile	Pro	Lys	Gln	Glu	Ser	Tyr	Asp	Gln	Ala	Asp	Val	Ile	Val
70					75					80				

Ala	Asn	Pro	Tyr	Leu	Lys	Tyr	Gly	Asp	Asp	Pro	Tyr	Thr	Leu	Gln
85					90					95				

Pauli sequence.txt

Tyr	Gly	Arg	Cys	Gly	Glu	Lys	Gly	Lys	Tyr	Ile	His	Phe	Thr	Pro	100	105	110
Asn	Phe	Leu	Leu	Thr	Asn	Asn	Phe	His	Ile	Tyr	Gly	Ser	Arg	Gly	115	120	125
Arg	Val	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Ile	Phe	130	135	140
Asp	Glu	Tyr	Asn	Val	Asp	Gln	Pro	Phe	Tyr	Ile	Ser	Arg	Lys	Asn	145	150	155
Thr	Ile	Glu	Ala	Thr	Arg	Cys	Ser	Thr	His	Ile	Thr	Gly	Ile	Asn	160	165	170
Val	Val	Phe	Lys	Lys	Cys	Pro	Gly	Gly	Ser	Cys	Ile	Thr	Ser	Leu	175	180	185
Cys	Arg	Arg	Asp	Ser	Gln	Thr	Gly	Leu	Tyr	Glu	Ala	Lys	Cys	Thr	190	195	200
Phe	Leu	Pro	Lys	Lys	Ser	Gln	Thr	Ala	Lys	Glu	Ser	Ile	Met	Phe	205	210	215
Met	Pro	Ser	Leu	His	Ser	Val	Thr	Glu	Phe	Cys	Thr	Glu	Lys	Thr	220	225	230
His	Asn	Thr	Glu	Ala	Pro	Asn	Leu	Gln	Asn	Lys	Met	Cys	Asn	Gly	235	240	245
Lys	Ser	Thr	Trp	Asp	Val	Ile	Met	Asn	Ser	Val	Asp	Phe	Gln	Asn	250	255	260
Thr	Ser	Pro	Met	Thr	Glu	Met	Asn	Pro	Pro	Thr	His	Pro	Thr	Phe	265	270	275
Ser	Leu	Leu	Lys	Ser	Lys	Gln	Arg	Val	Val	Cys	Leu	Val	Leu	Asp	280	285	290
Lys	Ser	Gly	Ser	Met	Ser	Ala	Glu	Asp	Arg	Leu	Phe	Gln	Met	Asn	295	300	305
Gln	Ala	Ala	Glu	Leu	Tyr	Leu	Ile	Gln	Val	Ile	Glu	Lys	Gly	Ser	310	315	320
Leu	Val	Gly	Met	Val	Thr	Phe	Asp	Ser	Val	Ala	Glu	Ile	Gln	Asn	325	330	335

Pauli sequence.txt

His	Leu	Thr	Arg	Ile	Thr	Asp	Asp	Asn	Val	Tyr	Gln	Lys	Ile	Thr	340	345	350
Ala	Lys	Leu	Pro	Gln	Val	Ala	Asn	Gly	Gly	Thr	Ser	Ile	Cys	Arg	355	360	365
Gly	Leu	Lys	Ala	Gly	Phe	Gln	Ala	Ile	Ile	His	Ser	Asp	Gln	Ser	370	375	380
Thr	Ser	Gly	Ser	Glu	Ile	Ile	Leu	Leu	Thr	Asp	Gly	Glu	Asp	Asn	385	390	395
Glu	Ile	Asn	Ser	Cys	Phe	Glu	Asp	Val	Lys	Arg	Ser	Gly	Ala	Ile	400	405	410
Ile	His	Thr	Ile	Ala	Leu	Gly	Pro	Ser	Ala	Ala	Lys	Glu	Leu	Glu	415	420	425
Thr	Lys	Ser	Asn	Met	Thr	Gly	Gly	Tyr	Arg	Phe	Phe	Ala	Asn	Lys	430	435	440
Asp	Ile	Thr	Gly	Leu	Thr	Asn	Ala	Phe	Ser	Arg	Ile	Ser	Ser	Arg	445	450	455
Ser	Gly	Ser	Ile	Thr	Gln	Gln	Ala	Ile	Gln	Leu	Glu	Ser	Lys	Ala	460	465	470
Leu	Lys	Ile	Thr	Gly	Arg	Lys	Arg	Val	Asn	Gly	Thr	Val	Pro	Val	475	480	485
Asp	Ser	Thr	Val	Gly	Asn	Asp	Thr	Phe	Phe	Val	Val	Thr	Trp	Thr	490	495	500
Ile	Gln	Lys	Pro	Glu	Ile	Val	Leu	Gln	Asp	Pro	Lys	Gly	Lys	Lys	505	510	515
Tyr	Lys	Thr	Ser	Asp	Phe	Lys	Glu	Asp	Lys	Leu	Asn	Ile	Arg	Ser	520	525	530
Ala	Arg	Leu	Gln	Ile	Pro	Gly	Ile	Ala	Glu	Thr	Gly	Thr	Trp	Thr	535	540	545
Tyr	Ser	Leu	Leu	Asn	Asn	His	Ala	Ser	Ser	Gln	Met	Leu	Thr	Val	550	555	560
Thr	Val	Thr	Thr	Arg	Ala	Arg	Ser	Pro	Thr	Ile	Pro	Pro	Val	Ile	565	570	575

Pauli sequence.txt

Ala	Thr	Ala	His	Met	Ser	Gln	His	Thr	Ala	His	Tyr	Pro	Ser	Pro	580	585	590
Met	Ile	Val	Tyr	Ala	Gln	Val	Ser	Gln	Gly	Phe	Leu	Pro	Val	Leu	595	600	605
Gly	Ile	Ser	Val	Ile	Ala	Ile	Ile	Glu	Thr	Glu	Asp	Gly	His	Gln	610	615	620
Val	Thr	Leu	Glu	Leu	Trp	Asp	Asn	Gly	Ala	Gly	Arg	Asp	Thr	Val	625	630	635
Lys	Asn	Asp	Gly	Ile	Tyr	Ser	Arg	Tyr	Phe	Thr	Asp	Tyr	Tyr	Gly	640	645	650
Asn	Gly	Arg	Tyr	Ser	Leu	Lys	Val	His	Ala	Gln	Ala	Arg	Asn	Asn	655	660	665
Thr	Ala	Arg	Leu	Asn	Leu	Arg	Gln	Pro	Gln	Asn	Lys	Val	Leu	Tyr	670	675	680
Val	Pro	Gly	Tyr	Val	Glu	Asn	Gly	Lys	Ile	Ile	Leu	Asn	Pro	Pro	685	690	695
Arg	Pro	Glu	Val	Lys	Asp	Asp	Leu	Ala	Lys	Ala	Lys	Ile	Glu	Asp	700	705	710
Phe	Ser	Arg	Leu	Thr	Ser	Gly	Gly	Ser	Phe	Thr	Val	Ser	Gly	Ala	715	720	725
Pro	Pro	Pro	Gly	Asn	His	Pro	Ser	Val	Phe	Pro	Pro	Ser	Lys	Ile	730	735	740
Thr	Asp	Leu	Glu	Ala	Lys	Phe	Lys	Glu	Asp	Tyr	Ile	Gln	Leu	Ser	745	750	755
Trp	Thr	Ala	Pro	Gly	Asn	Val	Leu	Asp	Lys	Gly	Lys	Ala	Glu	Ser	760	765	770

<210> 12

<211> 821

<212> PRT

<213> Unknown

<220>

<223> Variant of Lu-ECAM-1 from bovine endothelial cells

Pauli sequence.txt

<400> 12

Met Val Leu Cys Leu Asn Val Ile Leu Phe Leu Thr Leu His Leu  
-20 -15 -10

Leu Pro Gly Met Lys Ser Ser Met Val Asn Leu Ile Asn Asn Gly  
-5 1 5

Tyr Asp Gly Ile Val Ile Ala Ile Asn Pro Ser Val Pro Glu Asp  
10 15 20

Glu Lys Leu Ile Glu Asn Ile Lys Glu Met Val Thr Glu Ala Ser  
25 30 35

Thr Tyr Leu Phe His Ala Thr Lys Arg Arg Val Tyr Phe Arg Asn  
40 45 50

Val Ser Ile Leu Ile Pro Met Thr Trp Lys Ser Lys Ser Glu Tyr  
55 60 65

Phe Ile Pro Lys Gln Glu Ser Tyr Asp Gln Ala Asp Val Ile Val  
70 75 80

Ala Asn Pro Tyr Leu Lys Tyr Gly Asp Asp Pro Tyr Thr Leu Gln  
85 90 95

Tyr Gly Arg Cys Gly Glu Lys Gly Lys Tyr Ile His Phe Thr Pro  
100 105 110

Asn Phe Leu Leu Thr Asn Asn Phe His Ile Tyr Gly Ser Arg Gly  
115 120 125

Arg Val Phe Val His Glu Trp Ala His Leu Arg Trp Gly Ile Phe  
130 135 140

Asp Glu Tyr Asn Val Asp Gln Pro Phe Tyr Ile Ser Arg Lys Asn  
145 150 155

Thr Ile Glu Ala Thr Arg Cys Ser Thr His Ile Thr Gly Ile Asn  
160 165 170

Val Val Phe Lys Lys Cys Pro Gly Gly Ser Cys Ile Thr Ser Leu  
175 180 185

Cys Arg Arg Asp Ser Gln Thr Gly Leu Tyr Glu Ala Lys Cys Thr  
190 195 200

Phe Leu Pro Lys Lys Ser Gln Thr Ala Lys Glu Ser Ile Met Phe  
205 210 215

Pauli sequence.txt

Met	Pro	Ser	Leu	His	Ser	Val	Thr	Glu	Phe	Cys	Thr	Glu	Lys	Thr	220	225	230
His	Asn	Thr	Glu	Ala	Pro	Asn	Leu	Gln	Asn	Lys	Met	Cys	Asn	Gly	235	240	245
Lys	Ser	Thr	Trp	Asp	Val	Ile	Met	Asn	Ser	Val	Asp	Phe	Gln	Asn	250	255	260
Thr	Ser	Pro	Met	Thr	Glu	Met	Asn	Pro	Pro	Thr	His	Pro	Thr	Phe	265	270	275
Ser	Leu	Leu	Lys	Ser	Lys	Gln	Arg	Val	Val	Cys	Leu	Val	Leu	Asp	280	285	290
Lys	Ser	Gly	Ser	Met	Ser	Ala	Glu	Asp	Arg	Leu	Phe	Gln	Met	Asn	295	300	305
Gln	Ala	Ala	Glu	Leu	Tyr	Leu	Ile	Gln	Val	Ile	Glu	Lys	Gly	Ser	310	315	320
Leu	Val	Gly	Met	Val	Thr	Phe	Asp	Ser	Val	Ala	Glu	Ile	Gln	Asn	325	330	335
His	Leu	Thr	Arg	Ile	Thr	Asp	Asp	Asn	Val	Tyr	Gln	Lys	Ile	Thr	340	345	350
Ala	Lys	Leu	Pro	Gln	Val	Ala	Asn	Gly	Gly	Thr	Ser	Ile	Cys	Arg	355	360	365
Gly	Leu	Lys	Ala	Gly	Phe	Gln	Ala	Ile	Ile	His	Ser	Asp	Gln	Ser	370	375	380
Thr	Ser	Gly	Ser	Glu	Ile	Ile	Leu	Leu	Thr	Asp	Gly	Glu	Asp	Asn	385	390	395
Glu	Ile	Asn	Ser	Cys	Phe	Glu	Asp	Val	Lys	Arg	Ser	Gly	Ala	Ile	400	405	410
Ile	His	Thr	Ile	Ala	Leu	Gly	Pro	Ser	Ala	Ala	Lys	Glu	Leu	Glu	415	420	425
Thr	Lys	Ser	Asn	Met	Thr	Gly	Gly	Tyr	Arg	Phe	Phe	Ala	Asn	Lys	430	435	440
Asp	Ile	Thr	Gly	Leu	Thr	Asn	Ala	Phe	Ser	Arg	Ile	Ser	Ser	Arg	445	450	455



Pauli sequence.txt

Ser	Gly	Ser	Ile	Thr	Gln	Gln	Ala	Ile	Gln	Leu	Glu	Ser	Lys	Ala	460	465	470
Leu	Lys	Ile	Thr	Gly	Arg	Lys	Arg	Val	Asn	Gly	Thr	Val	Pro	Val	475	480	485
Asp	Ser	Thr	Val	Gly	Asn	Asp	Thr	Phe	Phe	Val	Val	Thr	Trp	Thr	490	495	500
Ile	Gln	Lys	Pro	Glu	Ile	Val	Leu	Gln	Asp	Pro	Lys	Gly	Lys	Lys	505	510	515
Tyr	Lys	Thr	Ser	Asp	Phe	Lys	Glu	Asp	Lys	Leu	Asn	Ile	Arg	Ser	520	525	530
Ala	Arg	Leu	Gln	Ile	Pro	Gly	Ile	Ala	Glu	Thr	Gly	Thr	Trp	Thr	535	540	545
Tyr	Ser	Leu	Leu	Asn	Asn	His	Ala	Ser	Ser	Gln	Met	Leu	Thr	Val	550	555	560
Thr	Val	Thr	Thr	Arg	Ala	Arg	Ser	Pro	Thr	Ile	Pro	Pro	Val	Ile	565	570	575
Ala	Thr	Ala	His	Met	Ser	Gln	His	Thr	Ala	His	Tyr	Pro	Ser	Pro	580	585	590
Met	Ile	Val	Tyr	Ala	Gln	Val	Ser	Gln	Gly	Phe	Leu	Pro	Val	Leu	595	600	605
Gly	Ile	Ser	Val	Ile	Ala	Ile	Ile	Glu	Thr	Glu	Asp	Gly	His	Gln	610	615	620
Val	Thr	Leu	Glu	Leu	Trp	Asp	Asn	Gly	Ala	Gly	Arg	Asp	Thr	Val	625	630	635
Lys	Asn	Asp	Gly	Ile	Tyr	Ser	Arg	Tyr	Phe	Thr	Asp	Tyr	Tyr	Gly	640	645	650
Asn	Gly	Arg	Tyr	Ser	Leu	Lys	Val	His	Ala	Gln	Ala	Arg	Asn	Asn	655	660	665
Thr	Ala	Arg	Leu	Asn	Leu	Arg	Gln	Pro	Gln	Asn	Lys	Val	Leu	Tyr	670	675	680
Val	Pro	Gly	Tyr	Val	Glu	Asn	Gly	Lys	Ile	Ile	Leu	Asn	Pro	Pro	685	690	695

Pauli sequence.txt

Arg Pro Glu Val Lys Asp Asp Leu Ala Lys Ala Lys Ile Glu Asp  
700 705 710

Phe Ser Arg Leu Thr Ser Gly Gly Ser Phe Thr Val Ser Gly Ala  
715 720 725

Pro Pro Pro Gly Asn His Pro Ser Val Phe Pro Pro Ser Lys Ile  
730 735 740

Thr Asp Leu Glu Ala Lys Phe Lys Glu Asp Tyr Ile Gln Leu Ser  
745 750 755

Trp Thr Ala Pro Gly Asn Val Leu Asp Lys Gly Lys Ala Ala Ser  
760 765 770

Gly Ser Phe Pro Met Ser Arg Phe Ser His Gln Val Ala Lys Val  
775 780 785

Leu Glu Leu Gln Leu Gln His Gln Ser Phe Gln  
790 795 800

<210> 13

<211> 342

<212> PRT

<213> Unknown

<220>

<223> Variant of Lu-ECAM-1 from bovine endothelial cells

<400> 13

Met Val Leu Cys Leu Asn Val Ile Leu Phe Leu Thr Leu His Leu  
-20 -15 -10

Leu Pro Gly Met Lys Ser Ser Met Val Asn Leu Ile Asn Asn Gly  
-5 1 5

Tyr Asp Gly Ile Val Ile Ala Ile Asn Pro Ser Val Pro Glu Asp  
10 15 20

Glu Lys Leu Ile Glu Asn Ile Lys Glu Met Val Thr Glu Ala Ser  
25 30 35

Thr Tyr Leu Phe His Ala Thr Lys Arg Arg Val Tyr Phe Arg Asn  
40 45 50

Val Ser Ile Leu Ile Pro Met Thr Trp Lys Ser Lys Ser Glu Tyr

Pauli sequence.txt

55		60		65
Phe	Ile	Pro	Lys	Gln
70		Glu	Ser	Tyr
		75		Asp
			Gln	Ala
			80	Asp
			Val	Ile
			Val	
Ala	Asn	Pro	Tyr	Leu
85		Lys	Tyr	Gly
		90		Asp
			Asp	Pro
			95	Tyr
			Thr	Leu
			Gln	
Tyr	Gly	Arg	Cys	Gly
100		Glu	Lys	Gly
		105		Lys
			Tyr	Ile
			110	His
				Phe
				Thr
				Pro
Asn	Phe	Leu	Leu	Thr
115		Asn	Asn	Phe
		120		His
			Ile	Tyr
			125	Gly
				Ser
				Arg
				Gly
Arg	Val	Phe	Val	His
130		Glu	Trp	Ala
		135		His
			Leu	Arg
			140	Trp
				Gly
				Ile
				Phe
Asp	Glu	Tyr	Asn	Val
145		Asp	Gln	Pro
		150		Phe
			Tyr	Ile
			155	Ser
				Arg
				Lys
				Asn
Thr	Ile	Glu	Ala	Thr
160		Arg	Cys	Ser
		165		Thr
			His	Ile
			170	Thr
				Gly
				Ile
				Asn
Val	Val	Phe	Lys	Lys
175		Cys	Pro	Gly
		180		Gly
			Ser	Cys
			185	Ile
				Thr
				Ser
				Leu
Cys	Arg	Arg	Asp	Ser
190		Gln	Thr	Gly
		195		Leu
			Tyr	Glu
			200	Ala
				Lys
				Cys
				Thr
Phe	Leu	Pro	Lys	Lys
205		Ser	Gln	Thr
		210		Ala
			Lys	Glu
			215	Ser
				Ile
				Met
				Phe
Met	Pro	Ser	Leu	His
220		Ser	Val	Thr
		225		Glu
			Phe	Cys
			230	Thr
				Glu
				Lys
				Thr
His	Asn	Thr	Glu	Ala
235		Pro	Asn	Leu
		240		Gln
			Asn	Lys
			245	Met
				Cys
				Asn
				Gly
Lys	Ser	Thr	Trp	Asp
250		Val	Ile	Met
		255		Asn
			Ser	Val
			260	Asp
				Phe
				Gln
				Asn
Thr	Ser	Pro	Met	Thr
265		Glu	Met	Asn
		270		Pro
			Pro	Thr
			275	His
				Pro
				Thr
				Phe
Ser	Leu	Leu	Lys	Ser
280		Lys	Gln	Arg
		285		Val
			Val	Cys
			290	Leu
				Val
				Leu
				Asp
Lys	Ser	Gly	Ser	Met
		Ser	Ala	Glu
			Asp	Ile
			Tyr	Leu
			Leu	Leu
			Ala	Leu

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295             300             305
Leu Ile Lys Ile Phe Lys Leu Ile Gly Asn Thr Ile
310             315             320 321

```

<220>  
<223> Oligonucleotide probe

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<210> 15
<211> 17
<212> PRT
<213> Artificial sequence
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<220>  
<223> Synthetic peptide

```
<400> 15
Glu Asp Glu Lys Leu Ile Glu Asn Ile Lys Glu Met Val Thr Glu
          5              10              15
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Ala Ser  
17

```
<210> 16
<211> 17
<212> PRT
<213> Artificial sequence
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Pauli sequence.txt

<220>

<223> synthetic peptide

<400> 16

Gln Asp Pro Lys Gly Lys Lys Tyr Lys Thr Ser Asp Phe Lys Glu  
1 5 10 15

Asp Lys  
17

<210> 17

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Amplification primer

<400> 17

atgttcaact catattactg gtat 24

<210> 18

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

<400> 18

tgtaggtttg gagcttctgt 20

<210> 19

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Amplification primer

<400> 19

cacagacagg gctgtatgaa 20

<210> 20

<211> 23

<212> DNA

<213> Artificial Sequence

Pauli sequence.txt

<220>

<223> Amplification Primer

<400> 20

ggagatgtat tctgaaagtc aac 23

<210> 21

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Amplification primer

<400> 21

atgttcaact catattactg gtac 24

<210> 22

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Amplification primer

<400> 22

tgtaggtttg gagcttccac 20

<210> 23

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Amplification primer

<400> 23

cacagacagg gctgtatgag 20

<210> 24

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Amplification primer

<400> 24

Pauli sequence.txt

ggagatgtat tttgaaagtc agt 23

<210> 25

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Amplification primer

<400> 25

actgaattca gcagactaac ctctggaggg tc 32

<210> 26

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Amplification primer

<400> 26

tctactagta gcttttagcta ctgaagaaca ag 32

<210> 27

<211> 3007

<212> DNA

<213> Homo sapiens

<400> 27

taaccgcgat tttccaaaga gaggaatcac agggagatgt acagca atg ggg	52
cca ttt aag agt tct gtg ttc atc ttg att ctt cac ctt cta gaa	97
ggg gcc ctg agt aat tca ctc att cag ctg aac aac aat ggc tat	142
gaa ggc att gtc gtt gca atc gac ccc aat gtg cca gaa gat gaa	187
aca ctc att caa caa ata aag gac atg gtg acc cag gca tct ctg	232
tat ctg ttt gaa gct aca gga aag cga ttt tat ttc aaa aat gtt	277
gcc att ttg att cct gaa aca tgg aag aca aag gct gac tat gtg	322
aga cca aaa ctt gag acc tac aaa aat gct gat gtt ctg gtt gct	367
gag tct act cct cca ggt aat gat gaa ccc tac act gag cag atg	412

Pauli sequence.txt

ggc aac tgt gga gag aag ggt gaa agg atc cac ctc act cct gat	457
ttc att gca gga aaa aag tta gct gaa tat gga cca caa ggt aag	502
gca ttt gtc cat gag tgg gct cat cta cga tgg gga gta ttt gac	547
gag tac aat aat gat gag aaa ttc tac tta tcc aat gga aga ata	592
caa gca gta aga tgt tca gca ggt att act ggt aca aat gta gta	637
aag aag tgt cag gga ggc agc tgt tac acc aaa aga tgc aca ttc	682
aat aaa gtt aca gga ctc tat gaa aaa gga tgt gag ttt gtt ctc	727
caa tcc cgc cag acg gag aag gct tct ata atg ttt gca caa cat	772
gtt gat tct ata gtt gaa ttc tgt aca gaa caa aac cac aac aaa	817
gaa gct cca aac aag caa aat caa aaa tgc aat ctc cga agc aca	862
tgg gaa gtg atc cgt gat tct gag gac ttt aag aaa acc act cct	907
atg aca aca cag cca cca aat ccc acc ttc tca ttg ctg cag att	952
gga caa aga att gtg tgt tta gtc ctt gac aaa tct gga agc atg	997
gcg act ggt aac cgc ctc aat cga ctg aat caa gca ggc cag ctt	1042
ttc ctg ctg cag aca gtt gag ctg ggg tcc tgg gtt ggg atg gtg	1087
aca ttt gac agt gct gcc cat gta caa agt gaa ctc ata cag ata	1132
aac agt ggc agt gac agg gac aca ctc gcc aaa aga tta cct gca	1177
gca gct tca gga ggg acg tcc atc tgc agc ggg ctt cga tcg gca	1222
ttt act gtg att agg aag aaa tat cca act gat gga tct gaa att	1267
gtg ctg ctg acg gat ggg gaa gac aac act ata agt ggg tgc ttt	1312
aac gag gtc aaa caa agt ggt gcc atc atc cac aca gtc gct ttg	1357
ggg ccc tct gca gct caa gaa cta gag gag ctg tcc aaa atg aca	1402
gga ggt tta cag aca tat gct tca gat caa gtt cag aac aat ggc	1447
ctc att gat gct ttt ggg gcc ctt tca tca gga aat gga gct gtc	1492



Pauli sequence.txt

tct cag cgc tcc atc cag ctt gag agt aag gga tta acc ctc cag	1537
aac agc cag tgg atg aat ggc aca gtg atc gtg gac agc acc gtg	1582
gga aag gac act ttg ttt ctt atc acc tgg aca acg cag cct ccc	1627
caa atc ctt ctc tgg gat ccc agt gga cag aag caa ggt ggc ttt	1672
gta gtg gac aaa aac acc aaa atg gcc tac ctc caa atc cca ggc	1717
att gct aag gtt ggc act tgg aaa tac agt ctg caa gca agc tca	1762
caa acc ttg acc ctg act gtc acg tcc cgt gcg tcc aat gct acc	1807
ctg cct cca att aca gtg act tcc aaa acg aac aag gac acc agc	1852
aaa ttc ccc agc cct ctg gta gtt tat gca aat att cgc caa gga	1897
gcc tcc cca att ctc agg gcc agt gtc aca gcc ctg att gaa tca	1942
gtg aat gga aaa aca gtt acc ttg gaa cta ctg gat aat gga gca	1987
ggt gct gat gct act aag gat gac ggt gtc tac tca agg tat ttc	2032
aca act tat gac acg aat ggt aga tac agt gta aaa gtg cgg gct	2077
ctg gga gga gtt aac gca gcc aga cgg aga gtg ata ccc cag cag	2122
agt gga gca ctg tac ata cct ggc tgg att gag aat gat gaa ata	2167
caa tgg aat cca cca aga cct gaa att aat aag gat gat gtt caa	2212
cac aag caa gtg tgt ttc agc aga aca tcc tcg gga ggc tca ttt	2257
gtg gct tct gat gtc cca aat gct ccc ata cct gat ctc ttc cca	2302
cct ggc caa atc acc gac ctg aag gcg gaa att cac ggg ggc agt	2347
ctc att aat ctg act tgg aca gct cct ggg gat gat tat gac cat	2392
gga aca gct cac aag tat atc att cga ata agt aca agt att ctt	2437
gat ctc aga gac aag ttc aat gaa tct ctt caa gtg aat act act	2482
gct ctc atc cca aag gaa gcc aac tct gag gaa gtc ttt ttg ttt	2527
aaa cca gaa aac att act ttt gaa aat ggc aca gat ctt ttc att	2572

Pauli sequence.txt

gct att cag gct gtt gat aag gtc gat ctg aaa tca gaa ata tcc 2617  
aac att gca cga gta tct ttg ttt att cct cca cag act ccg cca 2662  
gag aca cct agt cct gat gaa acg tct gct cct tgt cct aat att 2707  
cat atc aac agc acc att cct ggc att cac att tta aaa att atg 2752  
tgg aag tgg ata gga gaa ctg cag ctg tca ata gcc tagggctgaa 2798  
tttttgtcag ataaataaaaa taaatcattc atcctttttt ttgattataa 2848  
aatttttttaa aatgtattttt agaattcctg tagggggcgga tataactaaat 2898  
gtatatagta catttataact aaatgtattc ctgtaggggg cgatatacta 2948  
aatgtattttt agaattcctg tagggggcgga taaaataaaa tgctaaacaa 2998  
ctgggggaaa 3007

<210> 28

<211> 914

<212> PRT

<213> Homo sapiens

<400> 28

Met	Gly	Pro	Phe	Lys	Ser	Ser	Val	Phe	Ile	Leu	Ile	Leu	His	Leu	1	5	10	15
Leu	Glu	Gly	Ala	Leu	Ser	Asn	Ser	Leu	Ile	Gln	Leu	Asn	Asn	Asn	20	25	30	
Gly	Tyr	Glu	Gly	Ile	Val	Val	Ala	Ile	Asp	Pro	Asn	Val	Pro	Glu	35	40	45	
Asp	Glu	Thr	Leu	Ile	Gln	Gln	Ile	Lys	Asp	Met	Val	Thr	Gln	Ala	50	55	60	
Ser	Leu	Tyr	Leu	Phe	Glu	Ala	Thr	Gly	Lys	Arg	Phe	Tyr	Phe	Lys	65	70	75	
Asn	Val	Ala	Ile	Leu	Ile	Pro	Glu	Thr	Trp	Lys	Thr	Lys	Ala	Asp	80	85	90	
Tyr	Val	Arg	Pro	Lys	Leu	Glu	Thr	Tyr	Lys	Asn	Ala	Asp	Val	Leu	95	100	105	
Val	Ala	Glu	Ser	Thr	Pro	Pro	Gly	Asn	Asp	Glu	Pro	Tyr	Thr	Glu				

Pauli sequence.txt

				110						115					120
Gln	Met	Gly	Asn	Cys	Gly	Glu	Lys	Gly	Glu	Arg	Ile	His	Leu	Thr	
				125					130					135	
Pro	Asp	Phe	Ile	Ala	Gly	Lys	Lys	Leu	Ala	Glu	Tyr	Gly	Pro	Gln	
				140					145					150	
Gly	Lys	Ala	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	
				155					160					165	
Phe	Asp	Glu	Tyr	Asn	Asn	Asp	Glu	Lys	Phe	Tyr	Leu	Ser	Asn	Gly	
				170					175					180	
Arg	Ile	Gln	Ala	Val	Arg	Cys	Ser	Ala	Gly	Ile	Thr	Gly	Thr	Asn	
				185					190					195	
Val	Val	Lys	Lys	Cys	Gln	Gly	Gly	Ser	Cys	Tyr	Thr	Lys	Arg	Cys	
				200					205					210	
Thr	Phe	Asn	Lys	Val	Thr	Gly	Leu	Tyr	Glu	Lys	Gly	Cys	Glu	Phe	
				215					220					225	
Val	Leu	Gln	Ser	Arg	Gln	Thr	Glu	Lys	Ala	Ser	Ile	Met	Phe	Ala	
				230					235					240	
Gln	His	Val	Asp	Ser	Ile	Val	Glu	Phe	Cys	Thr	Glu	Gln	Asn	His	
				245					250					255	
Asn	Lys	Glu	Ala	Pro	Asn	Lys	Gln	Asn	Gln	Lys	Cys	Asn	Leu	Arg	
				260					265					270	
Ser	Thr	Trp	Glu	Val	Ile	Arg	Asp	Ser	Glu	Asp	Phe	Lys	Lys	Thr	
				275					280					285	
Thr	Pro	Met	Thr	Thr	Gln	Pro	Pro	Asn	Pro	Thr	Phe	Ser	Leu	Leu	
				290					295					300	
Gln	Ile	Gly	Gln	Arg	Ile	Val	Cys	Leu	Val	Leu	Asp	Lys	Ser	Gly	
				305					310					315	
Ser	Met	Ala	Thr	Gly	Asn	Arg	Leu	Asn	Arg	Leu	Asn	Gln	Ala	Gly	
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Gln	Leu	Phe	Leu	Leu	Gln	Thr	Val	Glu	Leu	Gly	Ser	Trp	Val	Gly	
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Pauli sequence.txt

				350						355					360
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Pro	Ala	Ala	Ala	Ser	Gly	Gly	Thr	Ser	Ile	Cys	Ser	Gly	Leu	Arg	
				380					385					390	
Ser	Ala	Phe	Thr	Val	Ile	Arg	Lys	Lys	Tyr	Pro	Thr	Asp	Gly	Ser	
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Glu	Ile	Val	Leu	Leu	Thr	Asp	Gly	Glu	Asp	Asn	Thr	Ile	Ser	Gly	
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Cys	Phe	Asn	Glu	Val	Lys	Gln	Ser	Gly	Ala	Ile	Ile	His	Thr	Val	
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Ala	Leu	Gly	Pro	Ser	Ala	Ala	Gln	Glu	Leu	Glu	Glu	Leu	Ser	Lys	
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Met	Thr	Gly	Gly	Leu	Gln	Thr	Tyr	Ala	Ser	Asp	Gln	Val	Gln	Asn	
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Ala	Val	Ser	Gln	Arg	Ser	Ile	Gln	Leu	Glu	Ser	Lys	Gly	Leu	Thr	
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Thr	Val	Gly	Lys	Asp	Thr	Leu	Phe	Leu	Ile	Thr	Trp	Thr	Thr	Gln	
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Pro	Pro	Gln	Ile	Leu	Leu	Trp	Asp	Pro	Ser	Gly	Gln	Lys	Gln	Gly	
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Ser	Ser	Gln	Thr	Leu	Thr	Leu	Thr	Val	Thr	Ser	Arg	Ala	Ser	Asn	
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Ala	Thr	Leu	Pro	Pro	Ile	Thr	Val	Thr	Ser	Lys	Thr	Asn	Lys	Asp	

Pauli sequence.txt

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Glu	Ser	Val	Asn	Gly	Lys	Thr	Val	Thr	Leu	Gln	Leu	Leu	Asp	Asn					
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Gly	Ala	Gly	Ala	Asp	Ala	Thr	Lys	Asp	Asp	Gly	Val	Tyr	Ser	Arg					
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Arg	Ala	Leu	Gly	Gly	Val	Asn	Ala	Ala	Arg	Arg	Arg	Val	Ile	Pro					
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Glu	Ile	Gln	Trp	Asn	Pro	Pro	Arg	Pro	Glu	Ile	Asn	Lys	Asp	Asp					
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Val	Gln	His	Lys	Gln	Val	Cys	Phe	Ser	Arg	Thr	Ser	Ser	Gly	Gly					
				725					730					735					
Ser	Phe	Val	Ala	Ser	Asp	Val	Pro	Asn	Ala	Pro	Ile	Pro	Asp	Leu					
				740					745					750					
Phe	Pro	Pro	Gly	Gln	Ile	Thr	Asp	Leu	Lys	Ala	Glu	Ile	His	Gly					
				755					760					765					
Gly	Ser	Leu	Ile	Asn	Leu	Thr	Trp	Thr	Ala	Pro	Gly	Asp	Asp	Tyr					
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Asp	His	Gly	Thr	Ala	His	Lys	Tyr	Ile	Ile	Arg	Ile	Ser	Thr	Ser					
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Ile	Leu	Asp	Leu	Arg	Asp	Lys	Phe	Asn	Glu	Ser	Leu	Gln	Val	Asn					
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Thr	Thr	Ala	Leu	Ile	Pro	Lys	Glu	Ala	Asn	Ser	Glu	Glu	Val	Phe					
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Leu	Phe	Lys	Pro	Glu	Asn	Ile	Thr	Phe	Glu	Asn	Gly	Thr	Asp	Leu					

Pauli sequence.txt

830										835					840				
Phe	Ile	Ala	Ile	Gln	Ala	Val	Asp	Lys	Val	Asp	Leu	Lys	Ser	Glu					
845										850					855				
Ile	Ser	Asn	Ile	Ala	Arg	Val	Ser	Leu	Phe	Ile	Pro	Pro	Gln	Thr					
860										865					870				
Pro	Pro	Glu	Thr	Pro	Ser	Pro	Asp	Glu	Thr	Ser	Ala	Pro	Cys	Pro					
875										880					885				
Asn	Ile	His	Ile	Asn	Ser	Thr	Ile	Pro	Gly	Ile	His	Ile	Leu	Lys					
890										895					900				
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<211> 3418

<212> DNA

<213> Homo sapiens

<400> 29

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ttg aat aac aat gga tat gat ggc att gtg att gca att aat ccc	138
agt gta cca gaa gat gaa aaa ctc att caa aac ata aag gaa atg	183
gta act gaa gca tct act cac ctg ttt cat gcc acc aaa caa aga	228
gct tat ttc agg aat gta agc att tta att cca atg acc tac aaa	273
tca aaa tct gag tac tta atc cca aaa caa gaa aca tat gac cag	318
gca gat gtc ata gtt gct gat ctt tac ctg aaa tac gga gat gat	363
ccc tat aca ctt caa tat gga caa tgt gga gat aaa gga caa tat	408
ata cat ttt act cca aac ttc ttg ttg act aat aac ttg gct acc	453
tat ggg cct cga ggt aaa gta ttt gtc cat ggg tgg gcc cat ctc	498
cgg tgg gga gta ttt gat gag tat aat gtg gac cag cca ttc tat	543

Pauli sequence.txt

att tcc aga aga aac act act gaa gca aca aga tgt tcc act cgt	588
att act gtt tac atg gtt ttg aac gaa tgc aag ggg gcc agc tgt	633
ata gca cga cca ttc aga cgt gac tca cag aca ggg ctg tat gaa	678
gca aaa tgt aca ttt atc cca aag aga tcc cag act gcc aag gaa	723
tcc att gtg ttt atg caa aat ctt gat tct gtg act gaa ttt tgt	768
act gaa aaa aca cac aat aaa gaa gct cca aac cta tat aac aaa	813
atg tgc aat cac aga agc aca tgg gat gta atc atg agc tct gaa	858
gat ttt cag cat tta tct ccc atg aca gaa ata aat tta cct cgt	903
cct aca ttt tca ttg ctc aag tcc aaa cag cgt gta gtc tgt ttg	948
gta ctt gat aaa tct gga agc atg aat gca gaa gac cgt ctc ttt	993
cga atg aat caa gca gca gaa ttg tac ttg att caa att att gaa	1038
aag gga tcc ttg gtt ggg ttg gtc aca ttt gac agt ttt gct aaa	1083
atc caa agt aag ctc ata aaa ata att gat gat aac act tac caa	1128
aag atc act gca aac ctg cct caa gaa gct gat ggt ggc act tca	1173
att tgc agg gga ctc aaa gca gga ttt cag gca att ccc cag agt	1218
aat cag agt act ttc ggt tct gaa atc ata tta cta aca gat ggg	1263
gaa gat tat caa ata agc tta tgc ttt gga gag gta aaa caa agt	1308
ggc aca gtc atc cac acc att gct ctg ggg ccg tct gct gac gaa	1353
gaa ctg gag acc ctg tca aat atg aca gga tta cat aag gga cac	1398
tgt tat act gaa agt tca tat agt gct ggg aag ttc atc ttt tgt	1443
gga cat cgt ttt tat gcc cat aaa aac ata aat ggc ctt att gat	1488
gct ttc agc aga att tca tct aga agt ggc agc atc tct cag cag	1533
gct ctt cag ttg gaa agt aaa act ttg aat atc cca gcg aag aaa	1578
tgg ata aat ggt aca gtg cct gtg gat agt aca gtt aga aat gat	1623

Pauli sequence.txt

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gaa ggt gaa cta aat att cgg tct gcc cgt ctt cga ata cca ggt	1758
att gca gag aca ggc act tgg act tac agc gtt cga aac aat cat	1803
acc aaa tct caa ttg cta act gtg aca atg acc act cga gca aga	1848
agc cct acc aca ctc cca gta att gca act gct cac atg agt caa	1893
aat aca gct cat tac cct agc cca gtg att gtt tat gca tgt gtc	1938
agt caa ggg ttt ctt cct gtt ctg gga atc aat gta aca gcc att	1983
ata gaa aat gaa gag gga cat caa gta aca ttg gag ctc tgc gac	2028
aat ggc gca ggt gct gat tct gtc aag aat gat ggc atc tac tca	2073
agg tat ttt aca gat tac cat gga aat ggt aga tac agt tta aaa	2118
gtg ctt acc cag gca aga aaa aac aca gct agg cta agt caa caa	2163
cag aat aaa gct ctg tat gta ccg cgc tat gct gaa aat gga aaa	2208
att ata ctg aac cca tcc aaa cct gaa gtc aca gat gat gtg gaa	2253
gga gct caa aca gac gac ttc agc aga ctc acc tct gga ggg tcg	2298
ttt act gta tca gga gtg cct cct aat ggt aat cat tct cag gtg	2343
ttc tca cct ggt aaa att gta gac ctc gag gct aag ttt caa gga	2388
gat cat att caa ctt tca tgg act gcc cct ggc aag gtc ctc gat	2433
aaa gga aga gct gag agc tac att ata aga ata agt aaa cat ttc	2478
ctg gac ctc caa gaa gat ttt gat aaa gct gct tta ata aat act	2523
tct ggt ctg ata cct aag gag cct ggt tca gta gaa agt ttt gaa	2568
ttt aaa cca gaa cct tct aaa ata gag aat ggt acg aca ttc tat	2613
att gca att caa gcc atc cat gaa gcc aat gtc acc tca gag gtt	2658
tca aac att gca caa gca act aac ttt att cct cca cag gaa ccc	2703



Pauli sequence.txt

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att ttt gga tta gct gta att tta tct ata ttt tat act aga aat 2793
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att ata ata tat aaa gtg aag tac aaa agt tgt aag ttt cct aat 2928
tac ttg att aat tat tac tat ttg agt tat tat atg tta atc aaa 2973
atg agt ata tca ttt cct gtc tgg aat aat cca ctc att aat ttt 3018
taatatgaaa agatatatat ttgtacttgt aagcatttta agaaacattt 3068
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<210> 30

<211> 1000

<212> PRT

<213> Homo sapiens

<400> 30

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Ser Pro Val Leu Lys Ser Ser Leu Val Thr Leu Asn Asn Asn Gly
          20          25          30

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Tyr Asp Gly Ile Val Ile Ala Ile Asn Pro Ser Val Pro Glu Asp
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Glu Lys Leu Ile Gln Asn Ile Lys Glu Met Val Thr Gln Ala Ser
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Pauli sequence.txt

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Val	Ser	Ile	Leu	Ile	Pro	Met	Thr	Tyr	Lys	Ser	Lys	Ser	Glu	Tyr	
				80					85					90	
Leu	Ile	Pro	Lys	Gln	Glu	Thr	Tyr	Asp	Gln	Ala	Asp	Val	Ile	Val	
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Ala	Asp	Leu	Tyr	Leu	Lys	Tyr	Gly	Asp	Asp	Pro	Tyr	Thr	Leu	Gln	
				110					115					120	
Tyr	Gly	Gln	Cys	Gly	Asp	Lys	Gly	Gln	Tyr	Ile	His	Phe	Thr	Pro	
				125					130					135	
Asn	Phe	Leu	Leu	Thr	Asn	Asn	Leu	Ala	Thr	Tyr	Gly	Pro	Arg	Gly	
				140					145					150	
Lys	Val	Phe	Val	His	Gly	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe	
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Asp	Glu	Tyr	Asn	Val	Asp	Gln	Pro	Phe	Tyr	Ile	Ser	Arg	Arg	Asn	
				170					175					180	
Thr	Thr	Glu	Ala	Thr	Arg	Cys	Ser	Thr	Arg	Ile	Thr	Val	Tyr	Met	
				185					190					195	
Val	Leu	Asn	Glu	Cys	Lys	Gly	Ala	Ser	Cys	Ile	Ala	Arg	Pro	Phe	
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Arg	Arg	Asp	Ser	Gln	Thr	Gly	Leu	Tyr	Glu	Ala	Lys	Cys	Thr	Phe	
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Ile	Pro	Lys	Arg	Ser	Gln	Thr	Ala	Lys	Glu	Ser	Ile	Val	Phe	Met	
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Gln	Asn	Leu	Asp	Ser	Val	Thr	Glu	Phe	Cys	Thr	Glu	Lys	Thr	His	
				245					250					255	
Asn	Lys	Glu	Ala	Pro	Asn	Leu	Tyr	Asn	Lys	Met	Cys	Asn	His	Arg	
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Ser	Thr	Trp	Asp	Val	Ile	Met	Ser	Ser	Glu	Asp	Phe	Gln	His	Leu	
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Ser	Pro	Met	Thr	Glu	Ile	Asn	Leu	Pro	Arg	Pro	Thr	Phe	Ser	Leu	
				290					295					300	

Pauli sequence.txt

Leu	Lys	Ser	Lys	Gln	Arg	Val	Val	Cys	Leu	Val	Leu	Asp	Lys	Ser	305	310	315
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Ala	Glu	Leu	Tyr	Leu	Ile	Gln	Ile	Ile	Glu	Lys	Gly	Ser	Leu	Val	335	340	345
Gly	Leu	Val	Thr	Phe	Asp	Ser	Phe	Ala	Lys	Ile	Gln	Ser	Lys	Leu	350	355	360
Ile	Lys	Ile	Ile	Asp	Asp	Asn	Thr	Tyr	Gln	Lys	Ile	Thr	Ala	Asn	365	370	375
Leu	Pro	Gln	Glu	Ala	Asp	Gly	Gly	Thr	Ser	Ile	Cys	Arg	Gly	Leu	380	385	390
Lys	Ala	Gly	Phe	Gln	Ala	Ile	Pro	Gln	Ser	Asn	Gln	Ser	Thr	Phe	395	400	405
Gly	Ser	Glu	Ile	Ile	Leu	Leu	Thr	Asp	Gly	Glu	Asp	Tyr	Gln	Ile	410	415	420
Ser	Leu	Cys	Phe	Gly	Glu	Val	Lys	Gln	Ser	Gly	Thr	Val	Ile	His	425	430	435
Thr	Ile	Ala	Leu	Gly	Pro	Ser	Ala	Asp	Glu	Glu	Leu	Glu	Thr	Leu	440	445	450
Ser	Asn	Met	Thr	Gly	Leu	His	Lys	Gly	His	Cys	Tyr	Thr	Glu	Ser	455	460	465
Ser	Tyr	Ser	Ala	Gly	Lys	Phe	Ile	Phe	Cys	Gly	His	Arg	Phe	Tyr	470	475	480
Ala	His	Lys	Asn	Ile	Asn	Gly	Leu	Ile	Asp	Ala	Phe	Ser	Arg	Ile	485	490	495
Ser	Ser	Arg	Ser	Gly	Ser	Ile	Ser	Gln	Gln	Ala	Leu	Gln	Leu	Glu	500	505	510
Ser	Lys	Thr	Leu	Asn	Ile	Pro	Ala	Lys	Lys	Trp	Ile	Asn	Gly	Thr	515	520	525
Val	Pro	Val	Asp	Ser	Thr	Val	Arg	Asn	Asp	Thr	Ser	Phe	Val	Val	530	535	540

Pauli sequence.txt

Thr	Trp	Thr	Ile	Gln	Lys	Pro	Ala	Ile	Ile	Leu	Gln	Asp	Pro	Lys	
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Gly	Lys	Lys	Tyr	Thr	Thr	Ser	Asp	Phe	Gln	Glu	Gly	Glu	Leu	Asn	
				560					565					570	
Ile	Arg	Ser	Ala	Arg	Leu	Arg	Ile	Pro	Gly	Ile	Ala	Glu	Thr	Gly	
				575					580					585	
Ile	Trp	Thr	Tyr	Ser	Val	Arg	Asn	Asn	His	Thr	Lys	Ser	Gln	Leu	
				590					595					600	
Leu	Thr	Val	Thr	Met	Thr	Thr	Arg	Ala	Arg	Ser	Pro	Thr	Thr	Leu	
				605					610					615	
Pro	Val	Ile	Ala	Thr	Ala	His	Ser	Met	Gln	Asn	Thr	Ala	His	Tyr	
				620					625					630	
Pro	Ser	Pro	Val	Ile	Val	Tyr	Ala	Cys	Val	Ser	Gln	Gly	Phe	Leu	
				635					640					645	
Pro	Val	Leu	Gly	Ile	Asn	Val	Thr	Ala	Ile	Ile	Glu	Asn	Glu	Glu	
				650					655					660	
Gly	His	Gln	Val	Thr	Leu	Glu	Leu	Cys	Asp	Asn	Gly	Ala	Gly	Ala	
				665					670					675	
Asp	Ser	Val	Lys	Asn	Asp	Gly	Ile	Tyr	Ser	Arg	Tyr	Phe	Thr	Asp	
				680					685					690	
Tyr	His	Gly	Asn	Gly	Arg	Tyr	Ser	Leu	Lys	Val	Leu	Thr	Gln	Ala	
				695					700					705	
Arg	Lys	Asn	Thr	Ala	Arg	Leu	Ser	Gln	Gln	Gln	Asn	Lys	Ala	Leu	
				710					715					720	
Tyr	Val	Pro	Arg	Tyr	Ala	Glu	Asn	Gly	Lys	Ile	Ile	Leu	Asn	Pro	
				725					730					735	
Ser	Lys	Pro	Glu	Val	Thr	Asp	Asp	Val	Glu	Gly	Ala	Gln	Thr	Asp	
				740					745					750	
Asp	Phe	Ser	Arg	Leu	Thr	Ser	Gly	Gly	Ser	Phe	Thr	Val	Ser	Gly	
				755					760					765	
Val	Pro	Pro	Asn	Gly	Asn	His	Ser	Gln	Val	Phe	Ser	Pro	Gly	Lys	
				770					775					780	

Pauli sequence.txt

Ile	Val	Asp	Leu	Glu	Ala	Lys	Phe	Gln	Gly	Asp	His	Ile	Gln	Leu	785	790	795
Ser	Trp	Thr	Ala	Pro	Gly	Lys	Val	Leu	Asp	Lys	Gly	Arg	Ala	Glu	800	805	810
Ser	Tyr	Ile	Ile	Arg	Ile	Ser	Lys	His	Phe	Leu	Asp	Leu	Gln	Glu	815	820	825
Asp	Phe	Asp	Lys	Ala	Ala	Leu	Ile	Asn	Thr	Ser	Gly	Leu	Ile	Pro	830	835	840
Lys	Glu	Pro	Gly	Ser	Val	Glu	Ser	Phe	Glu	Phe	Lys	Pro	Glu	Pro	845	850	855
Ser	Lys	Ile	Glu	Asn	Gly	Thr	Thr	Phe	Tyr	Ile	Ala	Ile	Gln	Ala	860	865	870
Ile	His	Glu	Ala	Asn	Val	Thr	Ser	Glu	Val	Ser	Asn	Ile	Ala	Gln	875	880	885
Ala	Thr	Asn	Phe	Ile	Pro	Pro	Gln	Glu	Pro	Ser	Ile	Pro	Asp	Leu	890	895	900
Gly	Thr	Asn	Ile	Ser	Ala	Ile	Ser	Leu	Ala	Ile	Phe	Gly	Leu	Ala	905	910	915
Val	Ile	Leu	Ser	Ile	Phe	Tyr	Thr	Arg	Asn	Tyr	Ile	Arg	Thr	Gln	920	925	930
Ile	Gln	Cys	Tyr	Thr	Tyr	Leu	Val	Asn	Ile	Tyr	Leu	Lys	Phe	Asn	935	940	945
Leu	Leu	Tyr	Leu	Leu	Ser	Ile	Ile	Lys	Leu	Ile	Ile	Ile	Tyr	Lys	950	955	960
Val	Lys	Tyr	Lys	Ser	Cys	Lys	Phe	Pro	Asn	Tyr	Leu	Ile	Asn	Tyr	965	970	975
Tyr	Tyr	Leu	Ser	Tyr	Tyr	Met	Leu	Ile	Lys	Met	Ser	Ile	Ser	Phe	980	985	990
Pro	Val	Trp	Asn	Asn	Pro	Leu	Ile	Asn	Phe						995	1000	

<210> 31

<211> 2970

Pauli sequence.txt

<212> DNA

<213> Homo sapiens

<400> 31

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ctg aag ttt gtg act ctc ctg gtt gcc tta agt tca gaa ctc cca      189
ttc ctg gga gct gga gta cag ctt caa gac aat ggg tat aat gga      234
ttg ctc att gca att aat cct cag gta cct gag aat cag aac ctc      279
atc tca aac att aag gaa atg ata act gaa gct tca ttt tac cta      324
ttt aat gct acc aag aga aga gta ttt ttc aga aat ata aag att      369
tta ata cct gcc aca tgg aaa gct aat aat aac agc aaa ata aaa      414
caa gaa tca tat gaa aag gca aat gtc ata gtg act gac tgg tat      459
ggg gca cat gga gat gat cca tac acc cta caa tac aga ggg tgt      504
gga aaa gag gga aaa tac att cat ttc aca cct aat ttc cta ctg      549
aat gat aac tta aca gct ggc tac gga tca cga ggc cga gtg ttt      594
gtc cat gaa tgg gcc cac ctc cgt tgg ggt gtg ttc gat gag tat      639
aac aat gac aaa cct ttc tac ata aat ggg caa aat caa att aaa      684
gtg aca agg tgt tca tct gac atc aca ggc att ttt gtg tgt gaa      729
aaa ggt cct tgc ccc caa gaa aac tgt att att agt aag ctt ttt      774
aaa gaa gga tgc acc ttt atc tac aat agc acc caa aat gca act      819
gca tca ata atg ttc atg caa agt tta tct tct gtg gtt gaa ttt      864
tgt aat gca agt acc cac aac caa gaa gca cca aac cta cag aac      909
cag atg tgc agc ctc aga agt gca tgg gat gta atc aca gac tct      954
gct gac ttt cac cac agc ttt ccc atg aat ggg act gag ctt cca      999
cct cct ccc aca ttc tcg ctt gta cag gct ggt gac aaa gtg gtc     1044

```

# Pauli sequence.txt

```

tgt tta gtg ctg gat gtg tcc agc aag atg gca gag gct gac aga 1089
ctc ctt caa cta caa caa gcc gca gaa ttt tat ttg atg cag att 1134
gtt gaa att cat acc ttc gtg ggc att gcc agt ttc gac agc aaa 1179
gga gag atc aga gcc cag cta cac caa att aac agc aat gat gat 1224
cga aag ttg ctg gtt tca tat ctg ccc acc act gta tca gct aaa 1269
aca gac atc agc att tgt tca ggg ctt aag aaa gga ttt gag gtg 1314
gtt gaa aaa ctg aat gga aaa gct tat ggc tct gtg atg ata tta 1359
gtg acc agc gga gat gat aag ctt ctt ggc aat tgc tta ccc act 1404
gtg ctc agc agt ggt tca aca att cac tcc att gcc ctg ggt tca 1449
tct gca gcc cca aat ctg gag gaa tta tca cgt ctt aca gga ggt 1494
tta aag ttc ttt gtt cca gat ata tca aac tcc aat agc atg att 1539
gat gct ttc agt aga att tcc tct gga act gga gac att ttc cag 1584
caa cat att cag ctt gaa agt aca ggt gaa aat gtc aaa cct cac 1629
cat caa ttg aaa aac aca gtg act gtg gat aat act gtg ggc aac 1674
gac act atg ttt cta gtt acg tgg cag gcc agt ggt cct cct gag 1719
att ata tta ttt gat cct gat gga cga aaa tac tac aca aat aat 1764
ttt atc acc aat cta act ttt cgg aca gct agt ctt tgg att cca 1809
gga aca gct aag cct ggg cac tgg act tac acc ctg aac aat acc 1854
cat cat tct ctg caa gcc ctg aaa gtg aca gtg acc tct cgc gcc 1899
tcc aac tca gct gtg ccc cca gcc act gtg gaa gcc ttt gtg gaa 1944
aga gac agc ctc cat ttt cct cat cct gtg atg att tat gcc aat 1989
gtg aaa cag gga ttt tat ccc att ctt aat gcc act gtc act gcc 2034
aca gtt gag cca gag act gga gat cct gtt acg ctg aga ctc ctt 2079
gat gat gga gca ggt gct gat gtt ata aaa aat gat gga att tac 2124

```

Pauli sequence.txt

```

tcg agg tat ttt ttc tcc ttt gct gca aat ggt aga tat agc ttg 2169
aaa gtg cat gtc aat cac tct ccc agc ata agc acc cca gcc cac 2214
tct att cca ggg agt cat gct atg tat gta cca ggt tac aca gca 2259
aac ggt aat att cag atg aat gct cca agg aaa tca gta ggc aga 2304
aat gag gag gag cga aag tgg ggc ttt agc cga gtc agc tca gga 2349
ggc tcc ttt tca gtg ctg gga gtt cca gct ggc ccc cac cct gat 2394
gtg ttt cca cca tgc aaa att att gac ctg gaa gct gta aaa gta 2439
gaa gag gaa ttg acc cta tct tgg aca gca cct gga gaa gac ttt 2484
gat cag ggc cag gct aca agc tat gaa ata aga atg agt aaa agt 2529
cta cag aat atc caa gat gac ttt aac aat gct att tta gta aat 2574
aca tca aag cga aat cct cag caa gct ggc atc agg gag ata ttt 2619
acg ttc tca ccc cag att tcc acg aat gga cct gaa cat cag cca 2664
aat gga gaa aca cat gaa agc cac aga att tat gtt gca ata cga 2709
gca atg gat agg aac tcc tta cag tct gct gta tct aac att gcc 2754
cag gcg cct ctg ttt att ccc ccc aat tct gat cct gta cct gcc 2799
aga gat tat ctt ata ttg aaa gga gtt tta aca gca atg ggt ttg 2844
ata gga atc att tgc ctt att ata gtt gtg aca cat cat act tta 2889
agc agg aaa aag aga gca gac aag aaa gag aat gga aca aaa tta 2934
tta taaataaata tccaaagtgt cttccttctc aaa 2970

```

<210> 32

<211> 943

<212> PRT

<213> Homo sapiens

<400> 32

Met	Thr	Gln	Arg	Ser	Ile	Ala	Gly	Pro	Ile	Cys	Asn	Leu	Lys	Phe
1				5					10					15



Pauli sequence.txt

Val	Thr	Leu	Leu	Val	Ala	Leu	Ser	Ser	Glu	Leu	Pro	Phe	Leu	Gly	20	25	30
Ala	Gly	Val	Gln	Leu	Gln	Asp	Asn	Gly	Tyr	Asn	Gly	Leu	Leu	Ile	35	40	45
Ala	Ile	Asn	Pro	Gln	Val	Pro	Glu	Asn	Gln	Asn	Leu	Ile	Ser	Asn	50	55	60
Ile	Lys	Glu	Met	Ile	Thr	Glu	Ala	Ser	Phe	Tyr	Leu	Phe	Asn	Ala	65	70	75
Thr	Lys	Arg	Arg	Val	Phe	Phe	Arg	Asn	Ile	Lys	Ile	Leu	Ile	Pro	80	85	90
Ala	Thr	Trp	Lys	Ala	Asn	Asn	Asn	Ser	Lys	Ile	Lys	Gln	Glu	Ser	95	100	105
Tyr	Glu	Lys	Ala	Asn	Val	Ile	Val	Thr	Asp	Trp	Tyr	Gly	Ala	His	110	115	120
Gly	Asp	Asp	Pro	Tyr	Thr	Leu	Gln	Tyr	Arg	Gly	Cys	Gly	Lys	Glu	125	130	135
Gly	Lys	Tyr	Ile	His	Phe	Thr	Pro	Asn	Phe	Leu	Leu	Asn	Asp	Asn	140	145	150
Leu	Thr	Ala	Gly	Tyr	Gly	Ser	Arg	Gly	Arg	Val	Phe	Val	His	Glu	155	160	165
Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe	Asp	Glu	Tyr	Asn	Asn	Asp	170	175	180
Lys	Pro	Phe	Tyr	Ile	Asn	Gly	Gln	Asn	Gln	Ile	Lys	Val	Thr	Arg	185	190	195
Cys	Ser	Ser	Asp	Ile	Thr	Gly	Ile	Phe	Val	Cys	Glu	Lys	Gly	Pro	200	205	210
Cys	Pro	Gln	Glu	Asn	Cys	Ile	Ile	Ser	Lys	Leu	Phe	Lys	Glu	Gly	215	220	225
Cys	Thr	Phe	Ile	Tyr	Asn	Ser	Thr	Gln	Asn	Ala	Thr	Ala	Ser	Ile	230	235	240
Met	Phe	Met	Gln	Ser	Leu	Ser	Ser	Val	Val	Glu	Phe	Cys	Asn	Ala	245	250	255

Pauli sequence.txt

Ser	Thr	His	Asn	Gln	Glu	Ala	Pro	Asn	Leu	Gln	Asn	Gln	Met	Cys
				260					265					270
Ser	Leu	Arg	Ser	Ala	Trp	Asp	Val	Ile	Thr	Asp	Ser	Ala	Asp	Phe
				275					280					285
His	His	Ser	Phe	Pro	Met	Asn	Gly	Thr	Glu	Leu	Pro	Pro	Pro	Pro
				290					295					300
Thr	Phe	Ser	Leu	Val	Gln	Ala	Gly	Asp	Lys	Val	Val	Cys	Leu	Val
				305					310					315
Leu	Asp	Val	Ser	Ser	Lys	Met	Ala	Glu	Ala	Asp	Arg	Leu	Leu	Gln
				320					325					330
Leu	Gln	Gln	Ala	Ala	Glu	Phe	Tyr	Leu	Met	Gln	Ile	Val	Glu	Ile
				335					340					345
His	Thr	Phe	Val	Gly	Ile	Ala	Ser	Phe	Asp	Ser	Lys	Gly	Glu	Ile
				350					355					360
Arg	Ala	Gln	Leu	His	Gln	Ile	Asn	Ser	Asn	Asp	Asp	Arg	Lys	Leu
				365					370					375
Leu	Val	Ser	Tyr	Leu	Pro	Thr	Thr	Val	Ser	Ala	Lys	Thr	Asp	Ile
				380					385					390
Ser	Ile	Cys	Ser	Gly	Leu	Lys	Lys	Gly	Phe	Glu	Val	Val	Glu	Lys
				395					400					405
Leu	Asn	Gly	Lys	Ala	Tyr	Gly	Ser	Val	Met	Ile	Leu	Val	Thr	Ser
				410					415					420
Gly	Asp	Asp	Lys	Leu	Leu	Gly	Asn	Cys	Leu	Pro	Thr	Val	Leu	Ser
				425					430					435
Ser	Gly	Ser	Thr	Ile	His	Ser	Ile	Ala	Leu	Gly	Ser	Ser	Ala	Ala
				440					445					450
Pro	Asn	Leu	Glu	Glu	Leu	Ser	Arg	Leu	Thr	Gly	Gly	Leu	Lys	Phe
				455					460					465
Phe	Val	Pro	Asp	Ile	Ser	Asn	Ser	Asn	Ser	Met	Ile	Asp	Ala	Phe
				470					475					480
Ser	Arg	Ile	Ser	Ser	Gly	Thr	Gly	Asp	Ile	Phe	Gln	Gln	His	Ile
				485					490					495

Pauli sequence.txt

Gln	Leu	Glu	Ser	Thr	Gly	Glu	Asn	Val	Lys	Pro	His	His	Gln	Leu
				500					505					510
Lys	Asn	Thr	Val	Thr	Val	Asp	Asn	Thr	Val	Gly	Asn	Asp	Ile	Met
				515					520					525
Phe	Leu	Val	Thr	Trp	Gln	Ala	Ser	Gly	Pro	Pro	Glu	Ile	Ile	Leu
				530					535					540
Phe	Asp	Pro	Asp	Gly	Arg	Lys	Tyr	Tyr	Thr	Asn	Asn	Phe	Thr	Thr
				545					550					555
Asn	Leu	Thr	Phe	Arg	Thr	Ala	Ser	Leu	Trp	Ile	Pro	Gly	Thr	Ala
				560					565					570
Lys	Pro	Gly	His	Trp	Thr	Tyr	Thr	Leu	Asn	Asn	Thr	His	His	Ser
				575					580					585
Leu	Gln	Ala	Leu	Lys	Val	Thr	Val	Thr	Ser	Arg	Ala	Ser	Asn	Ser
				590					595					600
Ala	Val	Pro	Pro	Ala	Thr	Val	Glu	Ala	Phe	Val	Glu	Arg	Asp	Ser
				605					610					615
Leu	His	Phe	Pro	His	Pro	Val	Met	Ile	Tyr	Ala	Asn	Val	Lys	Gln
				620					625					630
Gly	Phe	Tyr	Pro	Ile	Ile	Asn	Ala	Thr	Val	Thr	Ala	Thr	Val	Glu
				635					640					645
Pro	Glu	Thr	Gly	Asp	Pro	Val	Thr	Leu	Arg	Leu	Leu	Asp	Asp	Gly
				650					655					660
Ala	Gly	Ala	Asp	Val	Ile	Lys	Asn	Asp	Gly	Ile	Tyr	Ser	Arg	Tyr
				665					670					675
Phe	Phe	Ser	Phe	Ala	Ala	Asn	Gly	Arg	Tyr	Ser	Leu	Lys	Val	His
				680					685					690
Val	Asn	His	Ser	Pro	Ser	Ile	Ser	Thr	Pro	Ala	His	Ser	Ile	Pro
				695					700					705
Gly	Ser	His	Ala	Met	Tyr	Val	Pro	Gly	Tyr	Thr	Ala	Asn	Gly	Asn
				710					715					720
Ile	Gln	Met	Asn	Ala	Pro	Arg	Lys	Ser	Val	Gly	Arg	Asn	Glu	Glu
				725					730					735

Pauli sequence.txt

Glu	Arg	Lys	Trp	Gly	Phe	Ser	Arg	Val	Ser	Ser	Gly	Gly	Ser	Phe	740	745	750
Ser	Val	Leu	Gly	Val	Pro	Ala	Gly	Pro	His	Pro	Asp	Val	Phe	Pro	755	760	765
Pro	Cys	Lys	Ile	Ile	Asp	Leu	Glu	Ala	Val	Lys	Val	Glu	Glu	Glu	770	775	780
Leu	Thr	Leu	Ser	Trp	Thr	Ala	Pro	Gly	Glu	Asp	Phe	Asp	Gln	Gly	785	790	795
Gln	Ala	Thr	Ser	Tyr	Glu	Ile	Arg	Met	Ser	Lys	Ser	Leu	Gln	Asn	800	805	810
Ile	Gln	Asp	Asp	Phe	Asn	Asn	Ala	Ile	Leu	Val	Asn	Thr	Ser	Lys	815	820	825
Arg	Asn	Pro	Gln	Gln	Ala	Gly	Ile	Arg	Glu	Ile	Phe	Thr	Phe	Ser	830	835	840
Pro	Gln	Ile	Ser	Thr	Asn	Gly	Pro	Glu	His	Gln	Pro	Asn	Gly	Glu	845	850	855
Thr	His	Glu	Ser	His	Arg	Ile	Tyr	Val	Ala	Ile	Arg	Ala	Met	Asp	860	865	870
Arg	Asn	Ser	Leu	Gln	Ser	Ala	Val	Ser	Asn	Ile	Ala	Gln	Ala	Pro	875	880	885
Leu	Phe	Ile	Pro	Pro	Asn	Ser	Asp	Pro	Val	Pro	Ala	Arg	Asp	Tyr	890	895	900
Leu	Ile	Leu	Lys	Gly	Val	Leu	Thr	Ala	Met	Gly	Leu	Ile	Gly	Ile	905	910	915
Ile	Cys	Leu	Ile	Ile	Val	Val	Thr	His	His	Thr	Leu	Ser	Arg	Lys	920	925	930
Lys	Arg	Ala	Asp	Lys	Lys	Glu	Asn	Gly	Thr	Lys	Leu	Leu			935	940	943

<210> 33

<211> 3022

<212> DNA

<213> Mus musculus

<400> 33

Pauli sequence.txt

actggagcag tgcgacc atg gtg cca ggg ctg cag gtc ctt ctg ttc	47
ctc acc ctg cat ctc ctg cag aac aca gag agc tcc atg gtg cat	92
ctc aac agc aat gga tac gag ggt gtg gtc att gcc att aac ccc	137
agt gtg cca gag gac gaa agg ctc atc cca agc ata aag gaa atg	182
gta act caa gct tct acc tac ctg ttt gaa gcc agc caa gga aga	227
gtt tat ttc agg aac ata agc ata tta gtc ccg atg acc tgg aag	272
tcg aaa tct gag tac tta atg cca aaa cga gaa tcg tac gac aaa	317
gca gac gtc ata gtt gcg gat cct cac ctg caa cat gga gac gac	362
ccc tac acc ctt cag tat gga cag tgt ggg gac aga gga cag tac	407
ata cac ttc act cca aac ttc cta ctc act gat aac ttg cgt atc	452
tat gga ccc cga ggc aga gtc ttt gtc cat gag tgg gcc cat ctc	497
cgg tgg gga gta ttt gat gag tat aac gtg gac cgg tca ctt tac	542
att tct aga aag aac act ata gaa gca aca agg tgc tcc gcc agc	587
atc aca ggc aag aag gtg gtc cac gag tgt cag aga ggc agc tgt	632
gtg aca agg gcg tgc cgg cgt gac tcg aag aca cgg ctg tat gaa	677
ccc aaa tgt aca ttt atc cca gac aaa ata cag aca gct ggg gcc	722
tcc ata atg ttc atg caa aac ctc aat tct gtg gtt gaa ttt tgc	767
aca gaa aat aac cac aat gca gaa gcc cca aac cta caa aac aaa	812
atg tgc aat cgc aga agc acg tgg gat gta atc aag acg tct gct	857
gac ttt cag aat gcc cct ccc atg aga gga aca gaa gcc cct cct	902
cca cct aca ttt tat ctg ctc aag tcc aga agg cga gtg gtg tgc	947
ttg gtg ctg gat aaa tct gga agc atg gac aaa gaa gac cgt ctt	992
att cga atg aat caa gca gca gaa ctg tac tta act caa att gtg	1037
gaa aag gag tct atg gtt gga tta gtc aca ttt gac agc gct gcc	1082

Pauli sequence.txt

cac atc caa aat tat cta ata aaa ata acg agt agt agt gac tac	1127
caa aag atc acc gca aac ctc ccc caa cag gct tct ggt gga act	1172
tca att tgc cat gga ctc cag gca gga ttt cag gca att acc tcc	1217
agt gac cag agc act tcc ggt tct gag atc gta ttg ctg aca gat	1262
ggg gaa gat aat gga ata cgt tcc tgc ttt gag gcc gtc tct cgc	1307
agc ggt gcc atc atc cac acc atc gct ctg ggg cct tcg cgt gcc	1352
cga gaa ctg gag act ctg tcg gac atg aca gga ggg ctt cgt ttc	1397
tat gcc aac aaa gac cta aac agc ctt atc gat gct ttc agt aga	1442
att tca tct aca agt ggc agc gtc tcc cag cag gct ctg cag ttg	1487
gag agc aaa gcc ttc gat gtc aga gca ggg gca tgg ata aac ggt	1532
aca gta cct ctg gac agt acc gtc ggc aac gac acg ttc ttt gtt	1577
atc acc tgg atg gta aaa aag cca gaa atc att ctt caa gat cca	1622
aaa gga aaa aaa tat aca acc tca gat ttc caa gat gat aaa cta	1667
aac atc cgg tct gct aga ctt caa ata ccg ggc act gca gag aca	1712
ggt act tgg act tac agc tac acg ggt acc aag tct cag ttg att	1757
aca atg aca gtg acc act cga gca aga agt ccc acc atg gaa cca	1802
ctc ctg ggc tac tgc tac atg agt cag agc aca gcc cag tac cct	1847
agc cgg atg att gtg tac gca cgg gtc agc caa gga ttt ttg cct	1892
gtt ctg gga gcc aat gtc aca gcc ctc ata gaa gct gaa cat gga	1937
cat caa gtc acc ttg gag ctc tgg gac aat ggg gca ggt gct gat	1982
atc gtt aaa aat gat ggc atc tac aca aga tac ttt aca gat tat	2027
cat gga aat ggt aga tac agc cta aaa gtg cgt gtc cag gca caa	2072
aga aac aaa acc aga ctg agc tta aga cag aag aac aag tct tta	2117
tat ata cct ggc tat gtg gaa aat ggt aaa att gta ctg aat cca	2162

Pauli sequence.txt

```

ccc aga cca gat gtc caa gaa gaa gcc ata gaa gct aca gtg gaa 2207
gac ttc aac aga gta acc tct gga ggg tcg ttt act gtg tct gga 2252
gcg ccc cct gat ggc gac cac gct cgt gtg ttc cca cca agt aaa 2297
gtc aca gac ctg gag gct gag ttt ata ggt gat tat att cac ctt 2342
aca tgg acg gcc cct ggc aag gtt ctc gac aat gga aga gca cat 2387
aga tac atc atc aga atg agc cag cat cct ctg gat ctc caa gaa 2432
gat ttt aac aat gct act tta gtg aat gct tcc agt ctg ata cct 2477
aaa gaa gct ggc tca aaa gaa gca ttt aaa ttc aaa cca gaa act 2522
ttt aaa ata gca aat ggc atc cag ctc tac att gca atc cag gca 2567
gac aat gaa gcc agt ctc acc tct gag gtc tcc aac atc gca cag 2612
gct gtc aag ctt act tct cta gaa gat agt atc tct gca ctg ggt 2657
gat gat att tct gca atc tct atg aca att tgg ggg tta act gtg 2702
att ttt aac tct att tta aac tagaagatag aatggcacta 2743
aaatgcaatc ctgtacatat ttgctaagtg ttgctttaga atgtctttac 2793
tacacactca aaggctgcct gtcaacaatt gtaatataga agttcatatt 2843
caaagttgaa aatcccgagt tactaacaca attcttttgc tatatgtaga 2893
tcaagattaa cagttcctca ttcaatttct taattgttcc atttactatg 2943
gaaataagat atccattctc ttttcacagt gtgatgcaag ttcactttgt 2993
atatgaaaat aaaaaatttg tacaactcg 3022

```

<210> 34

<211> 902

<212> PRT

<213> Mus musculus

<400> 34

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Met Val Pro Gly Leu Gln Val Leu Leu Phe Leu Thr Leu His Leu
          5                      10                      15

```

```

Leu Gln Asn Thr Glu Ser Ser Met Val His Leu Asn Ser Asn Gly

```

Pauli sequence.txt

	20		25		30
Tyr Glu Gly Val Val Ile Ala Ile Asn Pro Ser Val Pro Glu Asp	35		40		45
Glu Arg Leu Ile Pro Ser Ile Lys Glu Met Val Thr Gln Ala Ser	50		55		60
Thr Tyr Leu Phe Glu Ala Ser Gln Gly Arg Val Tyr Phe Arg Asn	65		70		75
Ile Ser Ile Leu Val Pro Met Thr Trp Lys Ser Lys Ser Glu Tyr	80		85		90
Leu Met Pro Lys Arg Glu Ser Tyr Asp Lys Ala Asp Val Ile Val	95		100		105
Ala Asp Pro His Leu Gln His Gly Asp Asp Pro Tyr Thr Leu Gln	110		115		120
Tyr Gly Gln Cys Gly Asp Arg Gly Gln Tyr Ile His Phe Thr Pro	125		130		135
Asn Phe Leu Leu Thr Asp Asn Leu Arg Ile Tyr Gly Pro Arg Gly	140		145		150
Arg Val Phe Val His Glu Trp Ala His Leu Arg Trp Gly Val Phe	155		160		165
Asp Glu Tyr Asn Val Asp Arg Ser Pro Tyr Ile Ser Arg Lys Asn	170		175		180
Thr Ile Glu Ala Thr Arg Cys Ser Ala Ser Ile Thr Gly Lys Lys	185		190		195
Val Val His Glu Cys Gln Arg Gly Ser Cys Val Thr Arg Ala Cys	200		205		210
Arg Arg Asp Ser Lys Thr Arg Leu Tyr Glu Pro Lys Cys Thr Phe	215		220		225
Ile Pro Asp Lys Ile Gln Thr Ala Gly Ala Ser Ile Met Phe Met	230		235		240
Gln Asn Leu Asn Ser Val Val Glu Phe Cys Thr Glu Asn Asn His	245		250		255
Asn Ala Glu Ala Pro Asn Leu Gln Asn Lys Met Cys Asn Arg Arg					



Pauli sequence.txt

260	265	270
Ser Thr Trp Asp Val Ile Lys Thr Ser Ala Asp Phe Gln Asn Ala		
275	280	285
Pro Pro Met Arg Gly Thr Glu Ala Pro Pro Pro Pro Thr Phe Tyr		
290	295	300
Leu Leu Lys Ser Arg Arg Arg Val Val Cys Leu Val Leu Asp Lys		
305	310	315
Ser Gly Ser Met Asp Lys Glu Asp Arg Leu Ile Arg Met Asn Gln		
320	325	330
Ala Ala Glu Leu Tyr Leu Thr Gln Ile Val Glu Lys Glu Ser Met		
335	340	345
Val Gly Leu Val Thr Phe Asp Ser Ala Ala His Ile Gln Asn Tyr		
350	355	360
Leu Ile Lys Ile Thr Ser Ser Ser Asp Tyr Gln Lys Ile Thr Ala		
365	370	375
Asn Leu Pro Gln Gln Ala Ser Gly Gly Thr Ser Ile Cys His Gly		
380	385	390
Leu Gln Ala Gly Phe Gln Ala Ile Thr Ser Ser Asp Gln Ser Thr		
395	400	405
Ser Gly Ser Glu Ile Val Leu Leu Thr Asp Gly Glu Asp Asn Gly		
410	415	420
Ile Arg Ser Cys Phe Glu Ala Val Ser Arg Ser Gly Ala Ile Ile		
425	430	435
His Thr Ile Ala Leu Gly Pro Ser Arg Ala Arg Glu Leu Glu Thr		
440	445	450
Leu Ser Asp Met Thr Gly Gly Leu Arg Phe Tyr Ala Asn Lys Asp		
455	460	465
Leu Asn Ser Leu Ile Asp Ala Phe Ser Arg Ile Ser Ser Thr Ser		
470	475	480
Gly Ser Val Ser Gln Gln Ala Leu Gln Leu Glu Ser Lys Ala Phe		
485	490	495
Asp Val Arg Ala Gly Ala Trp Ile Asn Gly Thr Val Pro Leu Asp		

Pauli sequence.txt

	500		505		510
Ser Thr Val Gly	Asn Asp Thr Phe Phe	Val Ile Thr Trp Met	Val		
	515		520		525
Lys Lys Pro Glu	Ile Ile Leu Gln Asp	Pro Lys Gly Lys Lys	Tyr		
	530		535		540
Thr Thr Ser Asp	Phe Gln Asp Asp Lys	Leu Asn Ile Arg Ser	Ala		
	545		550		555
Arg Leu Gln Ile	Pro Gly Thr Ala Glu	Thr Gly Thr Trp Thr	Tyr		
	560		565		570
Ser Tyr Thr Gly	Thr Lys Ser Gln Leu	Ile Thr Met Thr Val	Thr		
	575		580		585
Thr Arg Ala Arg	Ser Pro Thr Met Glu	Pro Leu Leu Gly Tyr	Cys		
	590		595		600
Tyr Met Ser Gln	Ser Thr Ala Gln Tyr	Pro Ser Arg Met Ile	Val		
	605		610		615
Tyr Ala Arg Val	Ser Gln Gly Phe Leu	Pro Val Leu Gly Ala	Asn		
	620		625		630
Val Thr Ala Leu	Ile Glu Ala Glu His	Gly His Gln Val Thr	Leu		
	635		640		645
Glu Leu Trp Asp	Asn Gly Ala Gly Ala	Asp Ile Val Lys Asn	Asp		
	650		655		660
Gly Ile Tyr Thr	Arg Tyr Phe Thr Asp	Tyr His Gly Asn Gly	Arg		
	665		670		675
Tyr Ser Leu Lys	Val Arg Val Gln Ala	Gln Arg Asn Lys Thr	Arg		
	680		685		690
Leu Ser Leu Arg	Gln Lys Asn Lys Ser	Leu Tyr Ile Pro Gly	Tyr		
	695		700		705
Val Glu Asn Gly	Lys Ile Val Leu Asn	Pro Pro Arg Pro Asp	Val		
	710		715		720
Gln Glu Glu Ala	Ile Glu Ala Thr Val	Glu Asp Phe Asn Arg	Val		
	725		730		735
Thr Ser Gly Gly	Ser Phe Thr Val Ser	Gly Ala Pro Pro Asp	Gly		

Pauli sequence.txt

740	745	750
Asp His Ala Arg Val Phe Pro Pro Ser Lys Val Thr Asp Leu Glu		
755	760	765
Ala Glu Phe Ile Gly Asp Tyr Ile His Leu Thr Trp Thr Ala Pro		
770	775	780
Gly Lys Val Leu Asp Asn Gly Arg Ala His Arg Tyr Ile Ile Arg		
785	790	795
Met Ser Gln His Pro Leu Asp Leu Gln Glu Asp Phe Asn Asn Ala		
800	805	810
Thr Leu Val Asn Ala Ser Ser Leu Ile Pro Lys Glu Ala Gly Ser		
815	820	825
Lys Glu Ala Phe Lys Phe Lys Pro Glu Thr Phe Lys Ile Ala Asn		
830	835	840
Gly Ile Gln Leu Tyr Ile Ala Ile Gln Ala Asp Asn Glu Ala Ser		
845	850	855
Leu Thr Ser Glu Val Ser Asn Ile Ala Gln Ala Val Lys Leu Thr		
860	865	870
Ser Leu Glu Asp Ser Ile Ser Ala Leu Gly Asp Asp Ile Ser Ala		
875	880	885
Ile Ser Met Thr Ile Trp Gly Leu Thr Val Ile Phe Asn Ser Ile		
890	895	900

Leu Asn  
902

<210> 35

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

<400> 35

gaaccttgcc aggggccg 18

<210> 36

<211> 22

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<212> DNA
<213> Artificial sequence

<220>
<223> Amplification primer

<400> 36
ccacgtgctt ctgcgattgc ac          22

<210> 37
<211> 31
<212> DNA
<213> Artificial sequence

<220>
<223> Amplification primer

<400> 37
gcggccgcaa tggggccatt taagagttct g          31

<210> 38
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> Amplification primer

<400> 38
gcggccgcag ccctaggcta ttgacagctg          30

<210> 39
<211> 24
<212> DNA
<213> Artificial sequence

<220>
<223> Amplification primer

<400> 39
agaatcaaga tgaacacaga actc          24

<210> 40
<211> 26
<212> DNA
<213> Artificial sequence

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Pauli sequence.txt

<220>

<223> Amplification primer

<400> 40

caaggtattt cacaacttat gacacg 26

<210> 41

<211> 29

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

<400> 41

gcggccgcta caacatgacc caaaggagc 29

<210> 42

<211> 43

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

<400> 42

gcggccgcga cactttggat atttatttat aataattttg ttc 43

<210> 43

<211> 19

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

<400> 43

cctttatggt ttgaatgag 19

<210> 44

<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

Pauli sequence.txt

<400> 44

caactatgac atctgcctgg tc

22

<210> 45

<211> 25

<212> DNA

<213> Artificial sequence

<220>

<223> Amplification primer

<400> 45

cacaaagcta ggctaagtca agaac

25

<210> 46

<211> 903

<212> PRT

<213> Unknown

<220>

<223> Calcium sensitive chloride channel from bovine tracheal epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016-31026)

<400> 46

Met Val Pro Arg Leu Thr Val Ile Leu Phe Leu Thr Leu His Leu  
5 10 15

Leu Pro Gly Met Lys Ser Ser Met Val Asn Leu Ile Asn Asn Gly  
20 25 30

Tyr Asp Gly Ile Val Ile Ala Ile Asn Pro Ser Val Pro Glu Asp  
35 40 45

Glu Lys Leu Ile Gln Asn Ile Lys Glu Met Val Thr Glu Ala Ser  
50 55 60

Thr Tyr Leu Phe His Ala Thr Lys Arg Arg Val Tyr Phe Arg Asn  
65 70 75

Val Ser Ile Leu Ile Pro Met Thr Trp Lys Ser Lys Ser Glu Tyr  
80 85 90

Leu Met Pro Lys Gln Glu Ser Tyr Asp Gln Ala Glu Val Ile Val  
95 100 105

Ala Asn Pro Tyr Leu Lys His Gly Asp Asp Pro Tyr Thr Leu Gln  
110 115 120

Pauli sequence.txt

Tyr	Gly	Arg	Cys	Gly	Glu	Lys	Gly	Gln	Tyr	Ile	His	Phe	Thr	Pro	125	130	135
Asn	Phe	Leu	Leu	Thr	Asn	Asn	Leu	Pro	Ile	Tyr	Gly	Ser	Arg	Gly	140	145	150
Arg	Ala	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Ile	Phe	155	160	165
Asp	Glu	Tyr	Asn	Gly	Asp	Gln	Pro	Phe	Tyr	Ile	Ser	Arg	Arg	Asn	170	175	180
Thr	Ile	Glu	Ala	Thr	Arg	Cys	Ser	Thr	His	Ile	Thr	Gly	Thr	Asn	185	190	195
Val	Ile	Val	Lys	Cys	Gln	Gly	Gly	Ser	Cys	Ile	Thr	Arg	Pro	Cys	200	205	210
Arg	Arg	Asp	Ser	Gln	Thr	Gly	Leu	Tyr	Glu	Ala	Lys	Cys	Thr	Phe	215	220	225
Ile	Pro	Glu	Lys	Ser	Gln	Thr	Ala	Arg	Glu	Ser	Ile	Met	Phe	Met	230	235	240
Gln	Ser	Leu	His	Ser	Val	Thr	Glu	Phe	Cys	Thr	Glu	Lys	Thr	His	245	250	255
Asn	Val	Glu	Ala	Pro	Asn	Leu	Gln	Asn	Lys	Met	Cys	Asn	Gly	Lys	260	265	270
Ser	Thr	Trp	Asp	Val	Ile	Met	Asn	Ser	Thr	Asp	Phe	Gln	Asn	Thr	275	280	285
Ser	Pro	Met	Thr	Glu	Met	Asn	Pro	Pro	Thr	Gln	Pro	Thr	Phe	Ser	290	295	300
Leu	Leu	Lys	Ser	Lys	Gln	Arg	Val	Val	Cys	Leu	Val	Leu	Asp	Lys	305	310	315
Ser	Gly	Ser	Met	Ser	Ser	Glu	Asp	Arg	Leu	Phe	Arg	Met	Asn	Gln	320	325	330
Ala	Ala	Glu	Leu	Phe	Leu	Ile	Gln	Ile	Ile	Glu	Lys	Gly	Ser	Leu	335	340	345
Val	Gly	Met	Val	Thr	Phe	Asp	Ser	Val	Ala	Glu	Ile	Arg	Asn	Asn	350	355	360

Pauli sequence.txt

Leu	Thr	Lys	Ile	Thr	Asp	Asp	Asn	Val	Tyr	Glu	Asn	Ile	Thr	Ala	365	370	375
Asn	Leu	Pro	Gln	Glu	Ala	Asn	Gly	Gly	Thr	Ser	Ile	Cys	Arg	Gly	380	385	390
Leu	Lys	Ala	Gly	Phe	Gln	Ala	Ile	Ile	Gln	Ser	Gln	Gln	Ser	Thr	395	400	405
Ser	Gly	Ser	Glu	Ile	Ile	Leu	Leu	Thr	Asp	Gly	Glu	Asp	Asn	Glu	410	415	420
Ile	His	Ser	Cys	Ile	Glu	Glu	Val	Lys	Gln	Ser	Gly	Val	Ile	Ile	425	430	435
His	Thr	Val	Ala	Leu	Gly	Pro	Ser	Ala	Ala	Lys	Glu	Leu	Glu	Thr	440	445	450
Leu	Ser	Asp	Met	Thr	Gly	Gly	His	Arg	Phe	Tyr	Ala	Asn	Lys	Asp	455	460	465
Ile	Asn	Gly	Leu	Thr	Asn	Ala	Phe	Ser	Arg	Ile	Ser	Ser	Arg	Ser	470	475	480
Gly	Ser	Ile	Thr	Gln	Gln	Thr	Ile	Gln	Leu	Glu	Ser	Lys	Ala	Leu	485	490	495
Ala	Ile	Thr	Glu	Lys	Lys	Trp	Val	Asn	Gly	Thr	Val	Pro	Val	Asp	500	505	510
Ser	Thr	Ile	Gly	Asn	Asp	Thr	Phe	Phe	Val	Val	Thr	Trp	Thr	Ile	515	520	525
Lys	Lys	Pro	Glu	Ile	Leu	Leu	Gln	Asp	Pro	Lys	Gly	Lys	Lys	Tyr	530	535	540
Lys	Thr	Ser	Asp	Phe	Lys	Glu	Asp	Lys	Leu	Asn	Ile	His	Ser	Ala	545	550	555
Arg	Leu	Arg	Ile	Pro	Gly	Ile	Ala	Glu	Thr	Gly	Thr	Trp	Thr	Tyr	560	565	570
Ser	Leu	Leu	Asn	Asn	His	Ala	Ser	Pro	Gln	Ile	Leu	Thr	Val	Thr	575	580	585
Val	Thr	Thr	Arg	Ala	Arg	Ser	Pro	Thr	Thr	Pro	Pro	Val	Thr	Ala	590	595	600



Pauli sequence.txt

Thr	Ala	His	Met	Asn	Gln	Asn	Thr	Ala	His	Tyr	Pro	Ser	Pro	Val	605	610	615
Ile	Val	Tyr	Ala	Gln	Val	Ser	Gln	Gly	Phe	Leu	Pro	Val	Leu	Gly	620	625	630
Ile	Asn	Val	Thr	Ala	Ile	Ile	Glu	Thr	Glu	Asp	Gly	His	Gln	Val	635	640	645
Thr	Leu	Glu	Leu	Trp	Asp	Asn	Gly	Ala	Gly	Ala	Asp	Ala	Thr	Lys	650	655	660
Asp	Asp	Gly	Val	Tyr	Ser	Arg	Tyr	Phe	Thr	Thr	Tyr	Asp	Thr	Asn	665	670	675
Gly	Arg	Tyr	Ser	Val	Lys	Val	His	Ala	Glu	Ala	Arg	Asn	Asn	Thr	680	685	690
Ala	Arg	Leu	Ser	Leu	Arg	Gln	Pro	Gln	Asn	Lys	Ala	Leu	Tyr	Ile	695	700	705
Pro	Gly	Tyr	Ile	Glu	Asn	Gly	Lys	Ile	Ile	Leu	Asn	Pro	Pro	Arg	710	715	720
Pro	Glu	Val	Lys	Asp	Asp	Leu	Ala	Lys	Ala	Glu	Ile	Glu	Asp	Phe	725	730	735
Ser	Arg	Leu	Thr	Ser	Gly	Gly	Ser	Phe	Thr	Val	Ser	Gly	Ala	Pro	740	745	750
Pro	Gly	Asn	His	Pro	Ser	Val	Leu	Pro	Pro	Asn	Lys	Ile	Thr	Asp	755	760	765
Leu	Glu	Ala	Lys	Phe	Lys	Glu	Asp	His	Ile	Gln	Leu	Ser	Trp	Thr	770	775	780
Ala	Pro	Ala	Asn	Val	Leu	Asp	Lys	Gly	Lys	Ala	Asn	Ser	Tyr	Ile	785	790	795
Ile	Arg	Ile	Ser	Lys	Ser	Phe	Leu	Asp	Leu	Gln	Lys	Asp	Phe	Asp	800	805	810
Asn	Ala	Thr	Leu	Val	Asn	Thr	Ser	Ser	Leu	Lys	Pro	Lys	Glu	Ala	815	820	825
Gly	Ser	Asp	Glu	Asn	Phe	Glu	Phe	Lys	Pro	Glu	Pro	Phe	Arg	Ile	830	835	840

Pauli sequence.txt

Glu Asn Gly Thr Asn Phe Tyr Ile Ala Val Gln Ala Ile Asn Glu  
845 850 855

Ala Asn Leu Thr Ser Glu Val Ser Asn Ile Ala Gln Ala Ile Lys  
860 865 870

Phe Ile Pro Met Pro Glu Asp Ser Val Pro Ala Leu Gly Thr Lys  
875 880 885

Ile Ser Ala Ile Asn Leu Ala Ile Phe Ala Leu Ala Met Ile Leu  
890 895 900

Ser Ile Val  
903

<210> 47

<211> 10

<212> PRT

<213> Homo sapiens

<220>

<223> partial sequence of human c-myc protein

<400> 47

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu  
5 10

<210> 48

<211> 675

<212> PRT

<213> homo sapiens

<220>

<223> amino acids 1-675 of SEQ ID NO:32 which make up putative 90 kDa subunit of hCLCA2

<400> 48

Met Thr Gln Arg Ser Ile Ala Gly Pro Ile Cys Asn Leu Lys Phe  
1 5 10 15

Val Thr Leu Leu Val Ala Leu Ser Ser Glu Leu Pro Phe Leu Gly  
20 25 30

Ala Gly Val Gln Leu Gln Asp Asn Gly Tyr Asn Gly Leu Leu Ile  
35 40 45

Ala Ile Asn Pro Gln Val Pro Glu Asn Gln Asn Leu Ile Ser Asn  
50 55 60

Pauli sequence.txt

Ile	Lys	Glu	Met	Ile	Thr	Glu	Ala	Ser	Phe	Tyr	Leu	Phe	Asn	Ala	65	70	75
Thr	Lys	Arg	Arg	Val	Phe	Phe	Arg	Asn	Ile	Lys	Ile	Leu	Ile	Pro	80	85	90
Ala	Thr	Trp	Lys	Ala	Asn	Asn	Asn	Ser	Lys	Ile	Lys	Gln	Glu	Ser	95	100	105
Tyr	Glu	Lys	Ala	Asn	Val	Ile	Val	Thr	Asp	Trp	Tyr	Gly	Ala	His	110	115	120
Gly	Asp	Asp	Pro	Tyr	Thr	Leu	Gln	Tyr	Arg	Gly	Cys	Gly	Lys	Glu	125	130	135
Gly	Lys	Tyr	Ile	His	Phe	Thr	Pro	Asn	Phe	Leu	Leu	Asn	Asp	Asn	140	145	150
Leu	Thr	Ala	Gly	Tyr	Gly	Ser	Arg	Gly	Arg	Val	Phe	Val	His	Glu	155	160	165
Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe	Asp	Glu	Tyr	Asn	Asn	Asp	170	175	180
Lys	Pro	Phe	Tyr	Ile	Asn	Gly	Gln	Asn	Gln	Ile	Lys	Val	Thr	Arg	185	190	195
Cys	Ser	Ser	Asp	Ile	Thr	Gly	Ile	Phe	Val	Cys	Glu	Lys	Gly	Pro	200	205	210
Cys	Pro	Gln	Glu	Asn	Cys	Ile	Ile	Ser	Lys	Leu	Phe	Lys	Glu	Gly	215	220	225
Cys	Thr	Phe	Ile	Tyr	Asn	Ser	Thr	Gln	Asn	Ala	Thr	Ala	Ser	Ile	230	235	240
Met	Phe	Met	Gln	Ser	Leu	Ser	Ser	Val	Val	Glu	Phe	Cys	Asn	Ala	245	250	255
Ser	Thr	His	Asn	Gln	Glu	Ala	Pro	Asn	Leu	Gln	Asn	Gln	Met	Cys	260	265	270
Ser	Leu	Arg	Ser	Ala	Trp	Asp	Val	Ile	Thr	Asp	Ser	Ala	Asp	Phe	275	280	285
His	His	Ser	Phe	Pro	Met	Asn	Gly	Thr	Glu	Leu	Pro	Pro	Pro	Pro	290	295	300

Pauli sequence.txt

Thr	Phe	Ser	Leu	Val	Gln	Ala	Gly	Asp	Lys	Val	Val	Cys	Leu	Val	305	310	315
Leu	Asp	Val	Ser	Ser	Lys	Met	Ala	Glu	Ala	Asp	Arg	Leu	Leu	Gln	320	325	330
Leu	Gln	Gln	Ala	Ala	Glu	Phe	Tyr	Leu	Met	Gln	Ile	Val	Glu	Ile	335	340	345
His	Thr	Phe	Val	Gly	Ile	Ala	Ser	Phe	Asp	Ser	Lys	Gly	Glu	Ile	350	355	360
Arg	Ala	Gln	Leu	His	Gln	Ile	Asn	Ser	Asn	Asp	Asp	Arg	Lys	Leu	365	370	375
Leu	Val	Ser	Tyr	Leu	Pro	Thr	Thr	Val	Ser	Ala	Lys	Thr	Asp	Ile	380	385	390
Ser	Ile	Cys	Ser	Gly	Leu	Lys	Lys	Gly	Phe	Glu	Val	Val	Glu	Lys	395	400	405
Leu	Asn	Gly	Lys	Ala	Tyr	Gly	Ser	Val	Met	Ile	Leu	Val	Thr	Ser	410	415	420
Gly	Asp	Asp	Lys	Leu	Leu	Gly	Asn	Cys	Leu	Pro	Thr	Val	Leu	Ser	425	430	435
Ser	Gly	Ser	Thr	Ile	His	Ser	Ile	Ala	Leu	Gly	Ser	Ser	Ala	Ala	440	445	450
Pro	Asn	Leu	Glu	Glu	Leu	Ser	Arg	Leu	Thr	Gly	Gly	Leu	Lys	Phe	455	460	465
Phe	Val	Pro	Asp	Ile	Ser	Asn	Ser	Asn	Ser	Met	Ile	Asp	Ala	Phe	470	475	480
Ser	Arg	Ile	Ser	Ser	Gly	Thr	Gly	Asp	Ile	Phe	Gln	Gln	His	Ile	485	490	495
Gln	Leu	Glu	Ser	Thr	Gly	Glu	Asn	Val	Lys	Pro	His	His	Gln	Leu	500	505	510
Lys	Asn	Thr	Val	Thr	Val	Asp	Asn	Thr	Val	Gly	Asn	Asp	Ile	Met	515	520	525
Phe	Leu	Val	Thr	Trp	Gln	Ala	Ser	Gly	Pro	Pro	Glu	Ile	Ile	Leu	530	535	540

Pauli sequence.txt

Phe	Asp	Pro	Asp	Gly	Arg	Lys	Tyr	Tyr	Thr	Asn	Asn	Phe	Thr	Thr
				545					550					555
Asn	Leu	Thr	Phe	Arg	Thr	Ala	Ser	Leu	Trp	Ile	Pro	Gly	Thr	Ala
				560					565					570
Lys	Pro	Gly	His	Trp	Thr	Tyr	Thr	Leu	Asn	Asn	Thr	His	His	Ser
				575					580					585
Leu	Gln	Ala	Leu	Lys	Val	Thr	Val	Thr	Ser	Arg	Ala	Ser	Asn	Ser
				590					595					600
Ala	Val	Pro	Pro	Ala	Thr	Val	Glu	Ala	Phe	Val	Glu	Arg	Asp	Ser
				605					610					615
Leu	His	Phe	Pro	His	Pro	Val	Met	Ile	Tyr	Ala	Asn	Val	Lys	Gln
				620					625					630
Gly	Phe	Tyr	Pro	Ile	Ile	Asn	Ala	Thr	Val	Thr	Ala	Thr	Val	Glu
				635					640					645
Pro	Glu	Thr	Gly	Asp	Pro	Val	Thr	Leu	Arg	Leu	Leu	Asp	Asp	Gly
				650					655					660
Ala	Gly	Ala	Asp	Val	Ile	Lys	Asn	Asp	Gly	Ile	Tyr	Ser	Arg	Tyr
				665					670					675

<210> 49

<211> 268

<212> PRT

<213> homo sapiens

<220>

<223> amino acids 676-943 of SEQ ID NO:32 which make up putative 35 kD a subunit of hCLCA2

<400> 49

Phe	Phe	Ser	Phe	Ala	Ala	Asn	Gly	Arg	Tyr	Ser	Leu	Lys	Val	His
1				5					10					15
Val	Asn	His	Ser	Pro	Ser	Ile	Ser	Thr	Pro	Ala	His	Ser	Ile	Pro
				20					25					30
Gly	Ser	His	Ala	Met	Tyr	Val	Pro	Gly	Tyr	Thr	Ala	Asn	Gly	Asn
				35					40					45

Pauli sequence.txt

Ile	Gln	Met	Asn	Ala	Pro	Arg	Lys	Ser	Val	Gly	Arg	Asn	Glu	Glu	50	55	60
Glu	Arg	Lys	Trp	Gly	Phe	Ser	Arg	Val	Ser	Ser	Gly	Gly	Ser	Phe	65	70	75
Ser	Val	Leu	Gly	Val	Pro	Ala	Gly	Pro	His	Pro	Asp	Val	Phe	Pro	80	85	90
Pro	Cys	Lys	Ile	Ile	Asp	Leu	Glu	Ala	Val	Lys	Val	Glu	Glu	Glu	95	100	105
Leu	Thr	Leu	Ser	Trp	Thr	Ala	Pro	Gly	Glu	Asp	Phe	Asp	Gln	Gly	110	115	120
Gln	Ala	Thr	Ser	Tyr	Glu	Ile	Arg	Met	Ser	Lys	Ser	Leu	Gln	Asn	125	130	135
Ile	Gln	Asp	Asp	Phe	Asn	Asn	Ala	Ile	Leu	Val	Asn	Thr	Ser	Lys	140	145	150
Arg	Asn	Pro	Gln	Gln	Ala	Gly	Ile	Arg	Glu	Ile	Phe	Thr	Phe	Ser	155	160	165
Pro	Gln	Ile	Ser	Thr	Asn	Gly	Pro	Glu	His	Gln	Pro	Asn	Gly	Glu	170	175	180
Thr	His	Glu	Ser	His	Arg	Ile	Tyr	Val	Ala	Ile	Arg	Ala	Met	Asp	185	190	195
Arg	Asn	Ser	Leu	Gln	Ser	Ala	Val	Ser	Asn	Ile	Ala	Gln	Ala	Pro	200	205	210
Leu	Phe	Ile	Pro	Pro	Asn	Ser	Asp	Pro	Val	Pro	Ala	Arg	Asp	Tyr	215	220	225
Leu	Ile	Leu	Lys	Gly	Val	Leu	Thr	Ala	Met	Gly	Leu	Ile	Gly	Ile	230	235	240
Ile	Cys	Leu	Ile	Ile	Val	Val	Thr	His	His	Thr	Leu	Ser	Arg	Lys	245	250	255
Lys	Arg	Ala	Asp	Lys	Lys	Glu	Asn	Gly	Thr	Lys	Leu	Leu			260	265	268

<210> 50

<211> 10

Pauli sequence.txt

<212> PRT

<213> artificial sequence

<220>

<223>

<400> 50

Ala	Phe	Ser	Arg	Ile	Ser	Ser	Gly	Thr	Gly
1				5					10

<210> 51

<211> 10

<212> PRT

<213> artificial sequence

<220>

<223>

<400> 51

Gly	Phe	Ser	Arg	Val	Ser	Ser	Gly	Gly	Ser
1				5					10

<210> 52

<211> 10

<212> PRT

<213> artificial sequence

<220>

<223>

<400> 52

Cys	Phe	Ser	Arg	Val	Ser	Ser	Gly	Gly	Ser
1				5					10

<210> 53

<211> 244

<212> PRT

<213> homo sapiens

<220>

<223>

<400> 53

Tyr	Ser	Val	Lys	Val	Arg	Ala	Leu	Gly	Gly	Val	Asn	Ala	Ala	Arg
1				5					10					15

Arg	Arg	Val	Ile	Pro	Gln	Gln	Ser	Gly	Ala	Leu	Tyr	Ile	Pro	Gly
				20					25					30

Pauli sequence.txt

Trp	Ile	Glu	Asn	Asp	Glu	Ile	Gln	Trp	Asn	Pro	Pro	Arg	Pro	Glu	35	40	45
Ile	Asn	Lys	Asp	Asp	Val	Gln	His	Lys	Gln	Val	Cys	Phe	Ser	Arg	50	55	60
Thr	Ser	Ser	Gly	Gly	Ser	Phe	Val	Ala	Ser	Asp	Val	Pro	Asn	Ala	65	70	75
Pro	Ile	Pro	Asp	Leu	Phe	Pro	Pro	Gly	Gln	Ile	Thr	Asp	Leu	Lys	80	85	90
Ala	Glu	Ile	His	Gly	Gly	Ser	Leu	Ile	Asn	Leu	Thr	Trp	Thr	Ala	95	100	105
Pro	Gly	Asp	Asp	Tyr	Asp	His	Gly	Thr	Ala	His	Lys	Tyr	Ile	Ile	110	115	120
Arg	Ile	Ser	Thr	Ser	Ile	Leu	Asp	Leu	Arg	Asp	Lys	Phe	Asn	Glu	125	130	135
Ser	Leu	Gln	Val	Asn	Thr	Thr	Ala	Leu	Ile	Pro	Lys	Glu	Ala	Asn	140	145	150
Ser	Glu	Glu	Val	Phe	Leu	Phe	Lys	Pro	Glu	Asn	Ile	Thr	Phe	Glu	155	160	165
Asn	Gly	Thr	Asp	Leu	Phe	Ile	Ala	Ile	Gln	Ala	Val	Asp	Lys	Val	170	175	180
Asp	Leu	Lys	Ser	Glu	Ile	Ser	Asn	Ile	Ala	Arg	Val	Ser	Leu	Phe	185	190	195
Ile	Pro	Pro	Gln	Thr	Pro	Pro	Glu	Thr	Pro	Ser	Pro	Asp	Glu	Thr	200	205	210
Ser	Ala	Pro	Cys	Pro	Asn	Ile	His	Ile	Asn	Ser	Thr	Ile	Pro	Gly	215	220	225
Ile	His	Ile	Leu	Lys	Ile	Met	Trp	Lys	Trp	Ile	Gly	Glu	Leu	Gln	230	235	240
Leu	Ser	Ile	Ala												244		

<210> 54

<211> 10



Pauli sequence.txt

<212> PRT

<213> artificial sequence

<220>

<223>

<400> 54

Ala Phe Val Arg Ile Ser Ser Gly Thr Gly  
1 5 10

<210> 55

<211> 10

<212> PRT

<213> artificial sequence

<220>

<223>

<400> 55

Ala Phe Ser Arg Ile Ser Ser Thr Ser Gly  
1 5 10

<210> 56

<211> 10

<212> PRT

<213> artificial sequence

<220>

<223>

<400> 56

Asp Phe Asn Arg Val Thr Ser Gly Gly Ser  
1 5 10

<210> 57

<211> 10

<212> PRT

<213> artificial sequence

<220>

<223>

<400> 57

Ala Phe Ser Arg Ile Ser Ser Arg Ser Gly  
1 5 10

<210> 58

<211> 10

Pauli sequence.txt

<212> PRT

<213> artificial sequence

<220>

<223>

<400> 58

Asp Phe Ser Arg Leu Thr Ser Gly Gly Ser  
1 5 10

<210> 59

<211> 10

<212> PRT

<213> artificial sequence

<220>

<223>

<400> 59

Ala Phe Gly Ala Leu Ser Ser Gly Asn Gly  
1 5 10

<210> 60

<211> 35

<212> PRT

<213> homo sapiens

<220>

<223>

<400> 60

Lys Val Ser Val Phe Gln Thr Asp Met Arg Phe Glu Lys Leu Glu  
1 5 10 15  
Pro Trp Pro Asn Ser Asp Pro Pro Phe Ser Phe Lys Asn Val Ile  
20 25 30  
Ser Leu Thr Glu Asp  
35

<210> 61

<211> 6

<212> PRT

<213> artificial sequence

<220>

<221> unsure

<222> 2, 4, 5; 2 is Ser or Asn, 4 is Ile or Leu or Val, 5 is Ser or Th  
r

<223>

# Pauli sequence.txt

<400> 61

Phe Xaa Arg Xaa Xaa Ser  
1 5 6

<210> 62

<211> 39

<212> PRT

<213> homo sapiens

<220>

<223>

<400> 62

Lys	Thr	Val	Met	Pro	Tyr	Ile	Ser	Thr	Thr	Pro	Ala	Lys	Leu	Arg
1				5					10					15
Asn	Pro	Cys	Thr	Ser	Gly	Gln	Asn	Cys	Thr	Thr	Pro	Phe	Ser	Tyr
				20					25					30
Lys	Asn	Val	Leu	Ser	Leu	Thr	Asn	Lys						
				35				39						

<210> 63

<211> 40

<212> PRT

<213> E.coli

<220>

<223>

<400> 63

Glu	Glu	Glu	Glu	Cys	Glu	Glu	Cys	Cys	Cys	Cys	Cys	Cys	Cys	Cys
1				5					10					15
Cys	Cys	Cys	Cys	Cys	Cys	Cys	Cys	Cys	Cys	Cys	Cys	Cys	Cys	Cys
				20					25					30
Cys	Glu	Glu	Glu	Glu	Glu	Cys	Cys	Cys	Cys					
				35				40						